The Harveian Oration.

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MR. PRESIDENT AND GENTLEMEN,—The pleasure with which I learnt that I had this year to discharge the time-honoured functions of Harveian Orator was largely alloyed with dismay at the difficult nature of the task before me. My predecessors have been so numerous (this commemoration of benefactors is held to-day for the 172nd time), they have also been so well equipped for the work by literary skill, by training, and by knowledge, that it might well be thought that nothing could be easier, or more certain to be successful, than to follow faithfully in their steps. But, unfortunately, the very number of my predecessors and their individual excellence render this course impossible—for it is one thing to imitate with more or less success the style and method of a great writer or speaker; it is another and a very different matter to reproduce his actual words and facts, to publish, so to speak, a new edition of his work with no real change except on the title page. Now, Harvey's shield has been burnished so often and with such sharp-sighted devotion that no spot or stain remains upon it, his claim to be the discoverer of the circulation of the blood has been fully established, his writings have been found to be pregnant with the ideas and discoveries of later generations—nay, more, the man himself has been proved to be not less than his work. His great discovery was no chance find, no mere lucky hit, but the natural outcome of his genius and of his time. How, then, can the belated Harveian Orator of the present day hope to add even one fresh pebble to the cairn which the love and the labour of generations have raised over the "immortal" Harvey?

On beginning my quest for something new, it soon became clear that of the two fields more especially open to me Sir James Paget had practically exhausted that of St. Bartholomew's Hospital in his "Records of William Harvey in Extracts from the Journals of St. Bartholomew's Hospital, with notes by James Paget," published in 1846; but I still hoped to discover, by the help of learned friends, some hitherto unnoticed records of Harvey's life in Oxford. Nor, indeed, is it impossible that such do exist, although I have failed to unearth them. The sole result of my search—and this I owe to the kindness of the present Warden of Merton College—is the following brief report, in the register of Merton College, of Harvey's speech to the Fellows on April 11th, 1645, two days after his admission to the wardenship: "Dominus custos convocatis in allâ aulâ sociis hæc verba ad illos fecit. Forsitan decessores custodiam Collegii ambiise, ut exinde sese locupletarent, se verò longè alio animo—nimirum ut Collegio lucro et emolumento potius foret; simulque socios ut concordiam amicitiamque inter se colerent, sedulo sollicitèque hortatus est." This fixes the exact date of Harvey's admission to the Wardenship—viz., on April 9th, 1645 (O.S.) And there is another reason for my dwelling on what may seem to be a matter of but small importance. On the strength of this short entry in the College register it has been stated that Harvey delivered a somewhat "pharisaical" speech to the Fellows. Now, if we bear in mind the violent passions aroused on both sides during the Civil War—nay, even if we judge his words by the modern standard of parliamentary language as established during this last session, Harvey can scarcely be held to have indulged in excessive abuse of his predecessors, including Sir Nathaniel Brent, or to have said too much in praise of himself. The exhortations to concord and good fellowship come with double weight from a man who cared first for learning and science, and then made provision also for a general feast once every year, and "at every meeting, once a month, for a small collation, as the President shall think fit, for the entertainment of such as come." By a very natural feeling on the part of the College, the lecture and feast, which Harvey guilelessly founded in commemoration of the benefactors of the College, have come to be devoted almost entirely to the commemoration of the most illustrious benefactor of them all—himself. The value of Harvey's great discovery can scarcely be exaggerated either in itself or as an illustration of scientific method and work, or in its effect on the course and development of physiological studies. There is no need to dwell on points such as these before this audience. We are all of one mind in the matter. But, besides these great things, Harvey's writings contain also many things of less importance indeed, but yet well worthy of our consideration—e. g., we may find in them no doubtful indications of the wise and prudent advice which he would have given us for the abatement of some, at least, of the evils under which our profession labours at the present day.

Let me give one or two illustrations of my meaning, taken from the first sixteen chapters of the treatise on "The Motion of the Heart and Blood."[1] In the first rank of the ills which beset the profession I do not hesitate to place the enormous amount of so-called medical literature. Were it all good there would still be quite enough of it. But could we get rid of the vain repetitions of all those books which contain little or no original work, and are too often the damaged seed, not the fruit, of practice and of a ripe experience; could we get rid of all the clinical observations, with the idle theories based upon them, which from their imperfections are simply misleading; could this be done, the residue would, no doubt, be small—might, indeed, bear much the same proportion to the original mass as fine gold does to the ore from which it has been extracted, but it would be far more valuable than anything which medical literature in its present form can offer to us. There is one publication which I regard with especial horror, the "invaluable" *Index Medicus*. I find that the volume for 1889, the last completed but not the greatest of eleven volumes, contains the names of not less than 13,870 contributors. Now, the index of the *Index* fully bears out the supposition that each pair of contributors represents not less than three communications, and thus we have a total of not less than 20,000 contributions to medical science for last year. I have much pleasure in admitting that many of them are short; but then it must not be overlooked that very many of them are substantial treatises in two volumes or more. That one volume of the *Index* alone contains sufficient material for a small library of monographs and systematic treatises, which a very moderate amount of mechanical industry could easily put together. I venture to think that no small part of medical literature would never have been written had its authors given heed to Harvey's words at the end of the dedication of his treatise on the "Motion of the Heart and Blood." "My dear colleagues," he writes, "I had no purpose to swell this treatise into a large volume by quoting the names and writings of anatomists, or to make a parade of the strength of my memory, the extent of my reading, and the amount of my pains; because I profess both to learn and to teach anatomy, not from books but from dissections; not from the positions of philosophers but from the fabric of nature. I avow myself the partisan of truth alone; and I can, indeed, say that I have used all my endeavours, bestowed all my pains in an attempt to produce something that should be agreeable to the good, profitable to the learned, and useful to letters."

Again, a very common reproach cast upon our profession is that we pretend to be, and are not, scientific; that, to quote an old sarcasm, our occupation consists in putting drugs of which we know nothing into bodies of which we know less. There is just sufficient truth in such criticisms to make them somewhat unpleasant to those for whose good they are no doubt intended, but they derive the keenness of their sting from our own shortcomings and mistakes. We claim too much and do too little for medicine. We forget that our duty as medical men is twofold—to practise an art and to study and advance a science; that we are bound to make the best use we can of the knowledge within our reach, and, if possible, to add to it in the using, but this last is not our chief duty. We dare not sacrifice the interests, the life of one single patient to the advancement of science. If our conscience were to cease to forbid us to do this, then the sooner modern science deprives us once for all of such a treacherous guide the better for the world will it be. A man may be a first-rate practitioner and yet have no title whatever to be ranked among

[1] Works of Wm. Harvey, M.D. By Robt. Willis, M.D. Sydenham Society.

scientific physiologists, as a sailor may be a first-rate navigator without being in any proper sense of the word a scientific astronomer or mathematician or physicist. Yet, in spite of this admission, the physiologist ought to be the last to taunt us with ignorance and empiricism, for his own science would be far more imperfect than it now is were it stripped of all that it owes to the results of medical and surgical practice. One of the best, if not the best, definitions of "medicine" is that which describes it as "applied physiology." If we fail to attain to that ideal, if we are compelled daily to act upon probabilities in place of scientific certainties, then the blame must rest at least as much on the physiologist as on ourselves. He fails to supply us with the knowledge which we require and which he alone can give us. Medicine is thus but one of many instances of an art stunted by the insufficient development of the science with which it is connected and on which it rests. I do not mean insufficient in a general sense, but insufficient for certain special purposes. Permit me to anticipate a very possible criticism upon what I have just said. It may be thought that my words are an unfair attack upon physiology, and that, safe from immediate contradiction, I have sought to defend medicine by abusing the very science to which, of all sciences, we are most deeply indebted. Now, if I have, indeed, done this thing, I have been guilty of the basest ingratitude; I have ignored the splendid services which physiology has rendered to medicine, services which we believe to be but the earnest of others yet more splendid in the near future. If physiology is, as it seems to me, not yet equal to all the requirements of medicine, that is certainly not due to the indolence or weakness of those who cultivate it, but to the inherent difficulties of their task. They have done all, and more than all, which we could have looked for. But at the sight of sickness which we cannot heal we grow impatient, unreasonable, and long for knowledge not yet within the reach of man. We even refuse to recognise the wisdom of those who decline to attempt to solve by scientific means problems not yet ripe for such solution. However, although the object matter with which we deal lends itself unwillingly to strict scientific method, although from its very nature we are unable to submit it to direct experiment, except in most imperfect fashion, it may still be studied and observed in a scientific spirit. Every case of disease may be, ought to be, looked upon as an experiment in practical physiology, an experiment carried out with transcendent skill by nature herself, but which she leaves it to us to observe, to register and to interpret.

Now, in this matter of scientific observation it cannot be denied that we fall very far short of what we might accomplish. It will do our profession no good to dwell upon the legitimate excuses which may in part explain our failure; rather let us acknowledge that failure and use our utmost efforts to remove it. Nor are leaders wanting who can teach us how this may best be done. We need not look beyond the circuit of our College to find men who can and do carry on their daily work in this scientific spirit, approving themselves herein worthy followers of the example of Harvey. Surely we cannot regard Harvey the physician as less scientific than Harvey the anatomist and physiologist, when we find him showing from certain familiar reasonings that the circulation is matter both of convenience and necessity. In his hands the physical signs of an aneurysm, the effect of extreme cold, the phenomena which attend "contagions, poisoned wounds, the bites of serpents and rabid animals, lues venerea, and the like"—all these are made to supply probable and cogent arguments for the truth of the doctrine of the circulation of the blood. Were our clinical knowledge as carefully accurate in its statement of facts, were it always used as soberly and to as good purpose as Harvey's was, then there would be, there could be, no outcry raised against us on the score of credulity or of want of scientific method. When he had arrived at a knowledge of the circulation of the blood by means of anatomical researches and vivisections, Harvey at once applied this knowledge to the explanation of clinical phenomena, up to that time inexplicable. He then used the fact that this explanation was a simple and adequate one as a new and strong argument for the truth of his discovery. That this intimate connexion, this solidarity, between physiology and medicine is no longer recognised so fully as it once was is much to be regretted, for it is injurious to both lines of study, and has arisen, at least in part, from faults on both sides. But this view must not be pushed too far. We must not lose sight of the fact that the relationship between physiology and medicine has in many ways greatly changed during the last 250 years, and that such change is a necessary consequence of the progress made by physiology. In Harvey's time, in any classification of the sciences, physiology might have been regarded as a department of medicine. I need scarcely say that now the reverse would be the case. The two deal, it is true, with the same object matter, for there is no physiological fact or law which is without some bearing upon medicine; and, again, every medical fact or generalisation, even those most purely empirical, is more or less important to physiology. But their aims and methods are so different that they tend inevitably to become more and more sharply differentiated from each other. The goal of physiology is truth—i.e., perfectly trustworthy knowledge of a certain class of facts and laws; and this independently of any use, good or bad, to which that knowledge may be put. The goal of medicine is power—i.e., ability to manipulate certain natural forces in such fashion as to produce certain effects. No doubt theoretically the two ends coincide, and we may hope that in some remote future they will do so in reality and perfectly. For the present we must be content with having in one direction much knowledge which confers little or no power, and on another side very imperfect knowledge which yet brings with it very great power, too often ill-directed. Again their methods are different. Physiology by slow degrees has come to rely more and more on purely scientific modes and instruments of research, and to apply them by preference to matters which can be brought to the test of direct experiment. Medicine, on the other hand, has no choice but to remain, so far as it has a scientific side, a science of observation; for anything like effective investigation of the matters with which it deals by direct experiment is impossible. As physiology slowly reduces to order the apparently hopeless confusion of so-called vital actions the easiest questions are attacked and answered first, and thus those which have to be faced later in their turn are more and more difficult, more and more refractory, to scientific analysis. Now, these more difficult questions are often of vital importance to medicine, and in them lie dormant vast possibilities of increased knowledge of the nature of disease, of increased power over it. And yet from the great difficulty of subjecting them to experiment physiology may seem for a time to fail us, and the task of employing physiological results to explain clinical facts, or to form the basis of rational treatment, becomes harder than ever.

This brief sketch of the relations between physiology and medicine and of the change which has gradually taken place in these relations—a change leading in appearance and for a time to a great widening of the interval which separates two sister sciences—is, I well know, very imperfect, and full of contentious matter; but it arose naturally, and took its colour from my own experience, especially from that of the last few months. Not the least important part of the charge of the Harveian Orator is that which directs him to exhort the Fellows and Members of the College to search and study out the secrets of nature by way of experiment. It is a little embarrassing for the scholar to find himself called upon to instruct his teachers, but I think I cannot employ the time at our disposal better or in a manner more agreeable to the declared intention of the great founder of this lecture than by laying some recent experience of my own before you. I do this with much diffidence and a full consciousness of my own inability to deal satisfactorily with the weighty matters involved in it, and would ask you not to overlook my shortcomings, but to correct them. In the course of last winter it was my fortune, whether good or bad I know not, to meet with several severe cases of hæmoptysis, two or three of which, in spite of my best efforts, ended fatally. About the same time I rashly undertook to give a lecture on the treatment of hæmoptysis at the City of London Hospital for Diseases of the Chest. My attempt to instruct others was repaid by the highest reward which can fall to the lot of a would-be teacher—the conviction of my own ignorance. I found, not for the first time, what many of you must also have found, that the treatment of hæmoptysis is eminently unsatisfactory. In fact, that, beyond a few general measures and simple remedies all tending to reduce blood-pressure in the vascular system as a whole, it was very doubtful whether our present supposed knowledge enabled us to do any good at all to our patient. I was reduced to a state of thera-

peutic despair, and even suspected that of the drugs commonly employed some might be actually injurious. The same feelings, the same sense of helplessness had often passed over me before, but without any good result. This time the stimulus, perhaps of St. Luke's day, was stronger, and I tried to look for a remedy. The following enumeration of remedies, which, at different times and on more or less satisfactory grounds, have been supposed to be of value in the treatment of hæmoptysis, is taken from a well-known standard work on pharmacology, therapeutics, and materia medica. Long as it is, a less critical author might have made large additions to it, nor have I any fault to find with the place which it and similar lists occupy in therapeutical writings—they are a necessary part of the work,—and in this case the writer has been careful to add to its value by drawing special attention to those means on which he believes that the most reliance may be placed. It is noteworthy that he does this in three cases only—viz., gallic acid, hamamelis, and lead acetate. "Acetic acid, aconite, alum, ammonium chloride, arnica, astringent inhalations, barium chloride, chlorodyne, chloroform (to outside of chest), copaiba, copper sulphate, digitalis, dry cups (to chest), ergot and ergotinin, ferric acetate, ferri persulphas, gallic acid, hamamelis, hot-water bag (to spine), ice, ipecacuanha, iron (and absolute rest), lead acetate, matico, morphine, opium, phosphoric acid, potassium bromide, potassium chlorate, potassium nitrate, pyrogallic acid, silver oxide, sodium chloride (in drachm doses), subsulphate of iron, sulphuric acid, tannin, tr. laricis, turpentine, veratrum viride." Now, on looking through a long list like this, one's first and last thought is that it gives us a very good illustration of the truth of the old axiom, that when many drugs are supposed each to cure one and the same disease, we may safely hold that few, if any of them, have the least influence over it. Some of these before us have been proposed on chemical, some on nervous or vasculo-nervous theories, and the claims of a few have been supported by direct physiological experiment; but all in the last resort profess to have had their worth determined by clinical observation of the effects which follow upon their employment. In a matter of this kind, however, clinical observation has to be received with great distrust, and must be carefully sifted. It is not sufficient to quote a long list of cases in a large percentage of which complete recovery followed the exhibition of certain remedies. With this we want a control list of the issues of cases which have run their course without any treatment whatever, and so far as hæmoptysis, or indeed any other disease, is concerned no such control list exists. Experience in large out-patient hospital practice for many years taught me that cases of hæmoptysis of all degrees of severity are of very frequent occurrence, in which recovery takes place without any medical interference, and that, too, under very unfavourable conditions of life. And further, that this *vis medicatrix naturæ*, this self-help, shows its power most clearly in what may seem to be the worst cases. For example, a patient has a sudden rapid profuse hæmoptysis, he remains at home, and the bleeding does not return, or only after a long interval, to be reckoned by weeks, months, or even years; or again, so soon as, or even before, the hæmorrhage has ceased, he is seen by a doctor, who injects ergotin subcutaneously, and believes, pardonably enough, that the injection has stopped the bleeding. But in each case the syncope following the sudden loss of even a comparatively small quantity of blood has given sufficient pause to the circulation to favour the formation of a clot in the ruptured vessel itself or in the bronchus or vomica with which it communicates.

We cannot judge of the effect of remedies without some knowledge of the natural history of the diseases in which they are employed. Perhaps in the case of hæmoptysis the same mistake—viz, that of attributing the natural termination of a pathological process to the effect of remedies—is repeated which up to a few years ago was made in that of pneumonia, another pulmonary affection, and of the specific fevers. Clinical observation has so far failed to give anything like scientific proof of the supposed influence of certain drugs upon hæmoptysis—i.e., upon the pulmonary circulation. After all, it is not very surprising that clinical observation has failed to give definite results in this matter. The difficulties in the way of investigating the relative effect of drugs by any means at the command of the medical observer may well be in many cases insuperable. But it is disappointing to find that the drugs which have been proved by direct physiological experiment to be at any rate likely, on the theories of those who propose them, to be of service in hæmoptysis, do not come more distinctly to the front, do not establish a stronger claim to our confidence than the rest. It almost seems as if in this case we could not expect to receive any help from physiology. Happily this is not so. Physiology is at last overcoming the great difficulties in the way of accurate determination of variations in the pulmonary circulation and of their causes; and the results already obtained, imperfect though they be, are of sufficient interest and importance to justify me in bringing them before you to-day. The relations between the systemic and the pulmonary circulations in respect of blood pressure and other conditions form a large, and it may be a very fertile, province of vascular physiology, which has been almost entirely ignored by medicine, and treated by physiology so slightly that it has yielded but few, if any, results of value to medicine. I do not know any treatise on systematic medicine, any monograph on diseases of the lungs, which contains even a hint that the two systems may be to some extent independent of each other, and may react in different ways to the same stimulus and in the same way to different stimuli. Throughout medicine assumes that indications for the treatment of pulmonary diseases may be taken from the systemic pulse as directly and with as much confidence as in the case of erysipelas or of enteritis. The pulmonary circulation is treated as if it were simply the termination of the systemic venous trunks into which a small additional pump—the right ventricle with its valvular arrangements—has been introduced, with the effect of preventing undue stagnation of the blood current. And this view does contain a half truth—e. g , in many cases of long-standing and extreme mitral incompetence we can trace, after death, everywhere as we pass backward against the blood stream from the left auricle to the large systemic veins, conclusive evidence of the existence during life of undue vascular tension. In the left auricle, pulmonary veins, pulmonary artery, the large systemic veins in the hepatic veins, we find thickening and opacity of the inner coat of the vessels—in fact, atheroma; and this, too, in cases where the systemic arteries, its most frequent seat, may be all but free from it. Throughout this tract it would seem that the same condition of undue pressure has prevailed, and that, if any forces exist tending to produce inequalities of pressure in different regions, they must be very feeble ones. Of course, this is an extreme though not infrequent case, and cannot be regarded as throwing much useful light upon the state of things in health, or even in less severe cases of disease. Anyhow, medicine, if it recognises any mechanism in the pulmonary circuit analogous to the vaso-motor arrangements on the systemic side, has not thought it worth while, or has not been able, to make any practical use of such knowledge.

Now, physiology has not done quite so much as we might wish, but it has certainly accomplished more than medicine has even attempted. It has taught us the relatively low blood pressure in the pulmonary artery, and has even succeeded in directly measuring this blood pressure, with the result of proving that the relation between the pulmonary and carotid pressure varies in different species of animals, being in the rabbit $\frac{1}{4{\cdot}2}$, in the cat $\frac{1}{5{\cdot}3}$, and in the dog $\frac{1}{3{\cdot}05}$. Again, physiology has established the existence in one species—the dog—of vaso-motor nerves, which exercise more or less control over the blood flow through the pulmonary artery. In a valuable paper communicated to the Royal Society in February, 1889, Dr. Bradford, Dr. Dean, and Mr. George Henry Lewes arrived at the following conclusions: "The pulmonary vessels of the dog are supplied with vaso-motor fibres, leaving the cord through the roots of the uppermost dorsal nerves. No efferent vaso-motor fibres have been detected in the vagus nerve. The pulmonary circulation is comparatively independent of the systemic, and alterations in the blood pressure of the latter must be of large amount to affect the pulmonary blood pressure. It is probable that no rise of aortic pressure can materially influence the pulmonary blood pressure, unless it is so great in amount or duration that the heart muscle and valves are unable to cope with it, and so an actual regurgitation is produced. It is possible that the pulmonary blood pressure can also be affected by

rises of systemic pressure causing venous distension, and hence an increased supply to the right side of the heart. Finally, although it is undoubted from the results of this research that the mammalian pulmonary vessels receive vaso-motor nerves, yet it is probable that the vaso-motor mechanism is but poorly developed as compared with that regulating the systemic arteries. In this respect it may be that the pulmonary system holds an intermediate position between the systemic arteries on the one hand, and the veins on the other." The experiments on which these conclusions rest are also interesting from other points of view. I will mention one which has a close connexion with my present purpose. "When the peripheral end of such a nerve as the sixth or seventh dorsal is excited a rise of pressure in both the pulmonary and aortic systems is observed. The pulmonary rise, although considerable—e.g., 3 or 4 mm. Hg.—is not out of proportion to the aortic rise, which, with these nerves, may be as much as 30 or 40 mm. Hg. On ascending, however, very different results are obtained. Thus, in one case the fifth dorsal gave an aortic rise of 10 mm. Hg. only, but the pulmonary rise was 3 mm. Hg. Clearly the latter was not a passive effect of the former. In another case the fourth dorsal gave an aortic rise of 20 mm. Hg., and a pulmonary rise of 4 mm. Hg. Perhaps, however, the most marked and conclusive result is seen with the third dorsal nerve. This nerve frequently causes no aortic rise, and, indeed, sometimes actually a fall—e.g., 10 mm. Hg.,—but in both these cases there is a distinct pulmonary rise of 3 or 4 mm. Hg."

Thus far, then, we have learnt: 1. That the pulmonary circulation, like the systemic, is, to a certain extent, under the control of vaso-motor nerves. 2. That the two vaso-motor systems are closely connected with each other, inasmuch as direct irritation of the same nerve or of the same part of the spinal cord produces a simultaneous effect on both sets of vessels. 3. That this effect may be either a rise or a fall in pressure in both, or a rise in one and a fall in the other. The next step was to ascertain whether the effect of certain drugs is the same, for each, upon the two circuits. The facts just mentioned make it, to say the least, highly probable that this is not the case, but the question could only be answered satisfactorily by direct experiment.

Through the kindness of Dr. Bradford of University College Hospital, and of Dr. Bokenham, assistant to my colleague, Dr. Lauder Brunton, in the science work-room of St. Bartholomew's Hospital, I am enabled to lay before you the following statements as to the comparative effect of certain substances upon the two circulations. Their researches were carried on entirely independently of each other, and yet their results are practically identical. In looking at the pressure tracings taken by them one cannot but be struck by the smallness of the variations in the pulmonary, as compared with those in the carotid, artery; but it must be remembered that in consequence of the lower natural pressure in the pulmonary artery alterations in pressure in either direction produce about twice the effect upon the rapidity of the lesser circulation which corresponding changes do upon the greater.

Muscarin.—In the *British Medical Journal* for Nov. 14th, 1874, Dr. Lauder Brunton gives the following account of the action of muscarin on the heart. Having thoroughly narcotised a rabbit with hydrate of chloral he commenced artificial respiration, and opened the thorax. Both sides of the heart seemed to be equally filled, the veins only moderately distended, and the lungs rosy. On injecting a little muscarin into the jugular vein everything at once changed. The lungs became blanched, the left side of the heart became small, the right side swelled up, and the vena cava became greatly distended. After a short time a little atropine was injected into the jugular vein, and everything instantly returned to its normal condition. The left side of the heart regained its former size, the right side diminished, the distension of the veins disappeared, and the blanched lungs again assumed a rosy hue. Distrusting his own personal observation Dr. Brunton got two observers who knew nothing about the experiment, and reported it before them, noting down their observations, which agreed exactly with his own. It is all but impossible, I think, either to doubt the accuracy of the record of this experiment, or to attribute the phenomena observed (especially the simultaneous distension of the pulmonary artery and the blanching of the lungs) to any other cause than the action of vaso-motor nerves. Subsequent observers seem to have failed to obtain the striking effects witnessed by Dr. Lauder Brunton, but his account is substantially confirmed by Dr. Bokenham, who tells me that muscarin in a small dose caused rapid fall in the carotid pressure, with, in most cases, a rise in the pulmonary pressure. This rise, however, is not long maintained. The pressure in the pulmonary artery sinks to normal, whilst that in the carotid more slowly rises to its original level. A large dose seems to produce paralysis of the heart and rapid fall of pressure in both circuits.

Amyl nitrite.—This, given by inhalation, caused rapid fall in carotid pressure, with simultaneous marked rise in pulmonary pressure. Carotid pressure then rose, and during this rise the pulmonary pressure resumed its original level.

Nitro-glycerine.—In the cat one-fiftieth of a grain produced a temporary great fall of the carotid, with a slight rise of the pulmonary pressure. When, however, the carotid fall had reached its lowest point, the pulmonary pressure also fell. The carotid pressure then rose, but not to the normal figure. At the beginning of this rise the pulmonary pressure showed some tendency to fall, but remained nearly constant. In the dog one-fiftieth of a grain produced a primary fall in the carotid, with little or no effect in the pulmonary pressure. A subsequent gradual rise of the carotid pressure then took place, with a very slight fall of pulmonary pressure during the greater part of the rise.

Digitalis.—Digitalin caused steady rise of blood pressure both in carotid and pulmonary arteries, with great slowing of pulse. Tincture of digitalis in dogs caused slight fall in carotid pressure, following soon after injection. At this time practically no effect on pulmonary pressure. Following this a steady rise in both pulmonary and carotid blood pressure. Infusion of digitalis in cats caused primary rise in blood pressure both in carotid and pulmonary arteries, followed by slight but more permanent rise. (The primary rise here was probably due to the fact that a large quantity of fluid had to be introduced, as the same result followed the injection of a similar quantity of water.)

Tincture of strophanthus.—In cats a small dose (min. i. to ii.) produced a primary fall of pressure in both carotid and pulmonary arteries, and a subsequent rise in pressure almost up to normal. The heart at the same time was slow and irregular. A large dose produced first a great rise of carotid pressure, the pulmonary pressure sinking slightly at first and then rising slightly. Then great quickening of heart with steady fall of pressure in carotid, the pulmonary falling to, but not below, its original level.

Ergot produces primary rise in pulmonary, with simultaneous fall in carotid pressure. This fall, however, is of short duration; subsequently both pressures rise.

Aconite.—This produces a fall in pressure in both carotid and pulmonary arteries.

Strychnine.—This produces in both carotid and pulmonary arteries a rise in pressure, especially marked in the pulmonary artery.

Chloroform.—Both pressures fall together.

Ether.—Both pressures rise together.

Atropine (sulphate of) produces first a steady fall in carotid pressure, the pulmonary sinking at the same time, but in much less degree. During this period the heart is slowed and the vagus nerve is excitable. Next pressure rises in both, and the pulse becomes more frequent, the inhibitory power of the vagus being gradually abolished. When the pressure reaches its highest point the heart cannot be stopped by stimulation of the vagus, and a second dose of atropine will have no further effect.

Quebracho (tincture of) produces in the carotid artery a primary fall, in the pulmonary artery a slight rise, followed in the carotid by a steady rise to a higher point than normal, whilst in the pulmonary artery the higher level already reached is maintained. Finally, in the carotid artery the pressure becomes very great, whilst in the pulmonary it does not rise above the slightly higher level it reached at first.

In the graphic records of these experiments there are many things of great interest, but from lack of time I have confined myself to one point only—viz., the pressure relations of the two circuits to each other. And it is clear that in some cases these relations, under the influence of the same drug, vary in a manner which could scarcely have been ascertained without the aid of direct experiment. It is difficult to arrive at any classification of them beyond this: that if the systemic pressure rises, then the pulmonary pressure also rises; if the systemic pressure falls, then the

pulmonary may either rise or fall. And even this is only true of the primary effect of the drug, for among the later effects—for example, in the case of amyl nitrite, and to a less extent in that of nitro-glycerine—the pressure in the pulmonary may fall, whilst that in the carotid is rising. Again, although it might be impossible from these pharmacological researches alone to prove the existence of pulmonary vaso-motor nerves, still—given the fact that such nerves do exist, and this has now been established—some of their results seem to find their best, perhaps only, explanation on the vaso-motor nerve theory. Of course, in the production of these variations of pressure vaso-motor influence is not the only one at work. They may be due to increased force of the heart's action, or to causes as purely mechanical as anything can be which takes place within a living organism, as, for instance, when a block in the aorta raises the pulmonary pressure, whilst a block on the right side of the heart or in the lungs lowers the systemic pressure. Still, the knowledge that certain conditions of pressure in the pulmonary circuit may be determined by the administration of certain drugs, even though we may be left in ignorance of the exact mode in which this effect is brought about, may be of great value. But before attempting to appraise the value to medicine of physiological (pharmacological) researches such as these, I have a mournful duty to perform. I must say "Good-bye" to my trusty physiological guides who have already fallen a little behind and decline to go with me any further. They tell me, and from the point of view of their science it is their plain duty to do so, that we have no right to assume that the results of experiments on animals, performed under conditions very different from those of healthy life, would hold good in the case of man, that no scientific proof of the existence of pulmonary vaso-motor nerves in the human subject has been given, and that it is very unlikely that such proof ever will be given. Thus it is difficult to imagine a more perfectly unscientific proceeding than to attempt to arrive at indications for treatment by virtue of assumptions which have no scientific basis whatever. That to do so is to step from the rock on to, and into, the quicksand. Well, until physiology holds out to us a more hopeful prospect than this, and more effectual aid than she does now, the path of our duty leads straight through the quicksand. We must make the most careful and the best use of the data, such as they are, which we possess, and we may then, after all, entertain good hopes that the conclusions which we come to, although logically they must always remain probable only, may yet be true.

Now personally my evidence in the matter is prejudiced. I confess that I should like to have myself a vaso-motor pulmonary arrangement with the latest improvements up to date. Such a mechanism, if it exists, must be a great comfort and advantage to its possessor. It would regulate from the most favourable standpoint the supply of blood to the left side of the heart, meeting and satisfying the various and ever-varying needs of the organism with the right quantity of freshly aerated blood, and at the same time safeguarding the delicate tissue of the lungs from the dangers which wait upon congestion. For when, as must often happen, the blood accumulates to more or less excess in the pulmonary circuit and in the great systemic venous trunks, then the action of pulmonary vaso-motor nerves would, *pro tanto*, tend to transfer the increase of pressure from the former to the large veins of the trunk, and to easily distensible organs such as the spleen and liver. In support of this let me refer you again to Dr. Lauder Brunton's experiments with muscarin, which prove that, at all events in some of the lower animals, a mechanism exists which is capable of accomplishing a great deal in the direction of relieving the pulmonary veins and capillaries from undue pressure. Of course this line of argument, a very tempting one to some people, is utterly worthless, and if no other and better proof can be adduced the case must be given up. Such an argument, however, may be found in the fact that pulmonary vaso-motor nerves of more or less activity have been demonstrated in the dog—i.e., certain nervous arrangements have been found to exist in that animal in connexion with the function of respiration, a function necessary to life, and carried on by very similar mechanism in many thousands of species. Is it not highly probable that this same nervous mechanism exists in all, or almost all, animals whose respiratory apparatus is similar, and their type of development not inferior to that of the particular species in which its existence has been demonstrated? So far as man is concerned the argument gains additional strength; its conclusion attains to a higher degree of probability when we remember that it is impossible to doubt the existence in him of systemic vaso-motor nerves at least as fully organised, as richly endowed, as those which have been demonstrated in lower animals by direct experiment, and to which in man, as in the dog, a pulmonary vaso-motor system would be a fitting complement. Surely there is uniformity in organic, not less than in inorganic nature—a uniformity which enables us to forecast with confidence the existence of similar functions and structures in animals specifically or generically allied. I have no wish to deny that conclusions arrived at by such a process are, after all, only probable, but their probability is eminently reasonable, if due care be taken in the verification and use of the facts on which they rest; the argument must start from facts recognised as such by science and not from mere hypotheses. In this way we may hope to maintain the wholesome and necessary relations between medicine and physiology, for it will be an evil day for both if ever the results of laboratory work are held to have no bearing upon medical practice. The not improbable hypothesis that pulmonary vaso-motor nerves exist in man may be used to explain some otherwise puzzling facts in connexion with disease of the heart, and especially of the mitral orifice. Cases are met with not infrequently in which the primary seat of the obstruction to the blood flow is on the left side of the heart, and there is no evidence of anything wrong on the right side. At the same time the cervical veins are distended, there is a certain amount of general anasarca, and exaggerated loudness of the second sound of the heart in the second left intercostal space makes it probable that there is undue pressure in the pulmonary artery. And yet the lungs, in whose veins and capillaries the effects of the cardiac difficulty must, one would think, be first felt, show but little if any signs of congestion. No doubt many explanations might be given of this state of things, but none meet the conditions of the problem more exactly than contraction of the pulmonary arterioles under some vaso-motor influence. Indeed, so far as the vessels are concerned, we may fairly compare the effect on the pulmonary artery of obstruction on the left side of the heart with that of cirrhosis of the kidneys on the systemic arteries. There is one conclusion to be drawn from the results of the pharmacological researches just laid before you which is of no small practical interest. If it be true, to use the statement in one of the best monographs on diseases of the lung, "that it is of great importance to relieve blood pressure in hæmoptysis," then aconite ought to be a much more efficient remedy for that affection than ergot. On this occasion your Harveian Orator enjoys great latitude in the choice of subjects and in his mode of treating them. I trust that in your judgment I have not abused that privilege. The relation of physiology to medicine, at all times a matter of supreme importance to our profession, is especially so at present, when from the rapid scientific development of physiology the two lines of study are year by year becoming more and more widely separated, not to say antagonistic; a state of things which is distinctly injurious to the scientific claims of medicine. The remedy is in our own hands. It is our duty now more than ever to work out and to utilise to the utmost the medical aspects of each fresh physiological advance, and we must bring our best powers to this task.

I have ventured to bring under your notice the "conditions of the pulmonary circulation" as a subject in which much yet remains to be done by physiology, and from which medicine may hope to derive no little benefit. Let me add that the results of such a research may be great or small, but until they have been realised by science and have found their place in medicine, Harvey's labours will not have yielded up their full fruit.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The medical report of this charity for the past quarter, just issued, shows that 1014 patients were admitted during the three months, and 807 were of rheumatic character. Of these, 231 were complicated with heart disease, the remaining 65 classified cases were such as might be met in general hospitals, and the 142 were cases of anæmia, debility, eczema, Bright's disease, cancer, &c. Two cases of accidents were received and one died.

ABSTRACT OF AN

Address

ON

ABDOMINAL SURGERY PAST AND PRESENT.

Delivered before the Medical Society of London, on Oct. 20th, 1890,

BY J. KNOWSLEY THORNTON, M.C.,
PRESIDENT.

IN choosing a subject for my address, I thought I could not do better than speak upon that branch of surgery to which the greater part of my professional life has been devoted. I propose, then, first to review briefly the past history of abdominal surgery, pointing out, as I recall the work of the past, the causes of its failures, which our riper experience has taught us how in a great measure to avoid, and then endeavour to take stock of our present work and indicate to the best of my ability the directions in which I think advances may still be made in what I shall venture to speak of as the triumphal march of abdominal surgery.

The operation of ovariotomy must undoubtedly be regarded as the starting-point of abdominal surgery, and Dr. Ephraim McDowell of Danville, Kentucky, as the father of this great operation, and there is every reason to suppose that to his studies under Mr. John Bell in my own *alma mater*, Edinburgh, he owed the suggestion which he successfully put into practice in 1809. He made a nine inch incision parallel to the fibres of the left rectus, the pedicle was secured by a ligature merely tied round it, and the long ends were brought out at the lower angle of the wound, which was closed by interrupted sutures fortified by strips of adhesive plaster. The patient was well in twenty-five days. In the third case, the incision was in the linea alba and the ligature was of whipcord. The reports of his operation are very brief, and it is impossible to make out from them the exact details of his method; but though it is nearly eighty years since this great step in abdominal surgery was taken, for the next sixty but little real advance was made. Ovariotomy became gradually more general, its statistics slowly improved, and isolated attacks were made upon fibroid tumours of the uterus, enlarged spleens, and other abdominal tumours, but success was the exception rather than the rule, and it seemed as if ovariotomy was to hold the field alone, and with a very heavy mortality.

Professor Nathan Smith of Yale, Connecticut, must also be credited as one of the originators of ovariotomy, because he operated at Norwich, Vermont, in July, 1821, with no previous knowledge of McDowell's work; and his method was nearly perfect, for his incision was only three inches. He waited to open the peritoneum till all blood had ceased to flow through the incision in the parietes, and he used animal ligatures, cutting them short and dropping in the pedicle, and the patient was walking about in three weeks.

Two years later, Dr. Alban Smith of Danville, Kentucky, took pains to include the cut edges of the peritoneum in his sutures. Rogers of New York, in 1829, again used short ligatures, tying the separate vessels in the pedicle and closing the incision, and in 1835 Billinger of Charleston, undaunted by a previous failure, operated successfully, tying the arteries in the pedicle with animal ligatures, cutting them short and closing the incision. In 1843 Dunlap and Atloe both performed their first operations, and they were the first who may be said to have become specialists, each going steadily on and doing a considerable number of cases. Dr. W. L. Atloe, brother of the above, performed his first successful operation in 1849, and was afterwards for many years the leading ovariotomist in America. According to Peaslee, the total number of known operators in the States up to 1850 was thirty-six with twenty-one recoveries, a mortality of 41·66 per cent. Then, in the next twenty years, the total rose to 739 operations, with the terribly increased mortality of 70 per cent. The long ligature first, and later the clamp, appear to be the chief causes of this lamentable failure. Then we must remember that this does not represent the whole early history of ovariotomy, for what strikes one most is the enormous number of incomplete operations; probably this was largely due to want of anæsthetics and of suitable instruments for dealing with adhesions and hæmorrhage. Peaslee was far ahead of his time when he wrote in 1865: "Recent facts lead to the conclusion that the treatment by the ligature cut short, and the pedicle left in the peritoneal cavity, as first practised by Dr. Nathan Smith, will prove to be the best method." Ten years later, when I first became thoroughly conversant with the methods employed by the then leading operators, I however found the clamp in general use and the mortality only reduced to from 25 to 35 per cent. I have dealt thus with the work of the American operators, because on their soil the operation had its birth; and I now pass to consider the history of the operation in our own country, where its greatest successes have undoubtedly been achieved.

In the Philosophical Transactions for 1724 is recorded a case of ovarian tumour operated on by Robert Houston of Glasgow in 1701. It recovered, but the case was an incomplete one. Both the Hunters discussed favourably the possibility of doing ovariotomy, and, as they were born and bred in the district where Houston's case was operated on, they probably knew all about it. I have already alluded to the influence which John Bell's teaching probably had on McDowell, and he was a friend of the Hunters, so that, though we cannot credit Houston with the first successful ovariotomy, we may well believe that from his venture the operation really sprang into being. Lizars attempted ovariotomy in 1823, but found no tumour. He had a successful case in 1825 with the long ligature; after that he had some unsuccessful and incomplete cases, and the result of his work seems to have been that the operation was thoroughly discredited in Scotland, and was not again attempted till 1845 by Handyside of Edinburgh. From this time till 1862 operations were infrequent, and then Keith began his work, obtaining brilliant results. In the sister isle operation had only been three times performed up to this time, and always with a fatal result.

In England Granville operated in London in 1826 and 1827, but the first case was abandoned on account of adhesions, and the second proved to be a uterine tumour. Ten years later Jeaffreson of Framlingham had a successful case, introducing the use of a very short incision, and in the same year King and West had successful cases. The first ovariotomy performed in a large London hospital—the London—was unsuccessful, and was by the last-named operator. In 1846 Cæsar Hawkins operated successfully in St. George's Hospital. In 1842 Charles Clay of Manchester commenced his operations, and in the same year Walne had the first success in London. Frederick Bird, Aston Key, Bransby Cooper, and S. Lane were amongst those who had the courage to perform the operation in these early days, though to Clay must be given the credit of establishing the operation at this time. He unfortunately, however, ceased to record his cases, doubts arose as to the results, and the operation was again falling into somewhat evil repute, when in 1858 Spencer Wells began to operate. At this time Baker Brown blazed like a comet across the field of surgery, dazzling the public and the profession by the brilliancy of his success and operative skill, but sinking almost as quickly to obscurity and loss of good name. In this country up to 1850 there were ninety-one cases against the thirty-six performed in the States, and among these ninety-one there was a mortality of 36·27 per cent. In February, 1858, Wells performed his first complete ovariotomy, using the long ligature, which came away with a large slough on the twelfth day, and the patient recovered. In his third case he used the clamp, and I must record my opinion that this was a most unfortunate thing, and acted as the great cause of the want of progress of the operation. When he threw aside the clamp and used only the short ligature, his results immediately improved enormously. Keith commenced to operate in 1862, using first a ligature for the pedicle, but keeping the stump out with a pin, and in his next case using the clamp. Tait followed five years later in 1867, and was for a considerable time a very unsuccessful operator; indeed, a careful examination of his published tables leads to the conclusion that his results only improved with the general improvement which took place in all abdominal work about fifteen years ago, that is when antiseptics in some form or the other came into common use

and when short silk ligature and the drainage-tube became popular. It has always surprised me that he of all men should have followed so blindly a method which he now so loudly decries.

Passing now to the continent of Europe, we find Delaporte proposing the operation in 1774, and in 1798 Chambon said that he was persuaded that a time would come when this operation would be extended to more numerous cases than he had proposed, and that it would not be found difficult to execute. In 1844 Chareau published a paper containing a collection of sixty-five operations, with a mortality of 35·38 per cent. In 1856–1857, at a great discussion at the French Academy of Medicine, all the best known names in French medicine and surgery were ranged in the opposition, and this checked the progress of the operation in France for several years. Kœberle of Strasburg, who has been one of the leading Continental operators, began in 1862. The results in France up to 1867 were deplorable, for with 122 operations there was a mortality of nearly 60 per cent. In Germany, Chrysmar, in 1819, first performed the operation, and this was the first case of it in Europe. From 1819 to 1856 sixty-four operations were performed in Germany with the terrible mortality of nearly 72 per cent. Even as late as 1870 the deaths exceeded the recoveries; but Lister has changed all that, and now the German operators run us very hard in their successes. It would occupy me too long if I were to attempt to follow, even in the brief fashion I have adopted so far, the rise and progress of ovariotomy in other European countries and in India and the colonies; it must suffice to say that nowhere did it make so good progress as in our own country, and in most places it was very slow in making any progress at all. Before considering in a little more detail the methods employed during these years of slow progress and occasional collapse, I will briefly refer to the operation for the removal of fibroid tumours of the womb and to the few removals of the spleen, which are really the only abdominal operations outside ovariotomy which were even attempted before the great advance of fifteen years ago, at which period I propose afterwards to commence my remarks on present abdominal surgery.

(To be concluded.)

INFECTIVE SUBPERIOSTEAL ABSCESSES.

BY HERBERT W. PAGE, F.R.C.S. ENG.,
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WHEN suppuration was common and pus was accounted laudable, it is conceivable that some cases of especial interest in the domain of inflammation may have escaped observation, being, so to say, lost in the crowd of surrounding abscesses; but now that the presence of suppuration is a cause of reproach in all surgically inflicted wounds, and pus is more often brought into a hospital than formed there from the first, any unusual features of certain suppurations are prone to arrest attention. The doctrine of infection with pyogenic organisms has thrown a new light on the origin of many abscesses which were formerly inexplicable and unexplained, and a cause is now seen of suppuration in the joints, for example, in pyæmia, and of the multiple abscesses sometimes found in the more chronic variety of this septic disease. The violent necrotic inflammation which occasionally attacks the growing epiphysial region of the long bones is, moreover, less obscure than it used to be. Examples of these inflammations are seen from time to time in every hospital, and within the past three years I have had under observation some cases of infective suppuration deserving of brief record. Thus, in the case of an infant repeated abscesses appeared in the subcutaneous tissues during the several weeks it lived, the entry of infection having been presumably at the wound caused by severance of the umbilical cord; and in the case of a man who had had tracheotomy performed preliminary to removal of his tongue, numerous very large and rapidly formed abscesses presented themselves in various parts of the body during the rest of his life, a period of several months, yet always in the subcutaneous tissues. The "selective affinity" thus exercised by the tissues for the infecting virus is manifested even more strikingly by the epiphysial inflammations. In one instance the head of one tibia was attacked, then that of the other, and presently the lower epiphysial region of the same bones followed suit. Mr. Watson Cheyne has dealt very thoroughly with this subject in his valuable lectures, "Suppuration and Septic Diseases," and has there shown how the "anatomical arrangement of the part," as he terms it, is an important factor in the production of acute osteo-myelitis, not less important, perhaps, than that of the seat of inoculation, dose of the poison, &c. Injury, he says, and the presence of cocci do not wholly explain the etiology of this disease, which, as a rule, has certain favourite seats. This was well exemplified in the case which has been mentioned, for the disease had its beginning in the head of the one bone which had been locally weakened by injury, while there had been no injury of the other parts attacked, and there must have been something else to determine their involvement in the same suppurative inflammation. It appears, therefore, that for the development of these suppurations there is something more required than injury and the harmful agency of the virus, which need not necessarily have gained entrance by a wounded surface; there is also the selective affinity of the tissues themselves, as determined by the anatomical arrangement of the part. These things were displayed by the following very remarkable case of subperiosteal suppuration which I desire here to relate.

A schoolboy, twelve years old, was admitted to St. Mary's Hospital on June 4th with a painful swelling below and on the inner side of the left knee. A fortnight previously he had been kicked on the part while at play, but a week went by before the pain became at all severe or he took to bed. The pain then increased, and kept him awake at night, and the place became tender. He lost his appetite, and on admission looked distinctly though not seriously ill. He was wasted, and had a temperature of 103° F. He had not had a rigor. There was very decided local inflammation at the part, with slight obscure deep-seated fluctuation. The site of this inflammation and his history made me fear that I might possibly have before me a case of epiphysial osteo-myelitis, and I accordingly had the boy taken to the theatre at once, and preparations were made for trephining the bone. A free incision through the periosteum let out a few drops of pus, but careful exploration led me to the conclusion that the inflammation was entirely on the surface of the bone, and was unconnected with mischief in the centre of it. His general condition seemed rather to favour this conclusion, for he was hardly ill enough and the local state was hardly bad enough for him to be the subject of an acute bone inflammation of a fortnight's duration. The incision gave him complete relief from pain, and his temperature on the following morning was 99°. For three days there was considerable discharge of pus from the wound, and the evening temperature ranged between 101° and 102°. Nevertheless, the local condition steadily improved, and there was no reason for thinking that a mistake had been made in not trephining the bone. On the 8th, however, he began to complain of pain over the inner side of the *right* foot and the lower end of the *right* fibula. Nothing was to be seen amiss until the next afternoon, when slight redness and tenderness were noted at both these places, and the evening temperature rose to 103·2°. The signs of inflammation had enormously increased by the 10th, and free incisions let out a large quantity of pus from beneath the periosteum, both of the fibula and of the first metatarsal bone, which were bare over a considerable area. Again there was relief from pain and fall of temperature, and all three wounds were doing well, having been thoroughly irrigated with perchloride solution and dressed with sal alembroth dressings. The very next day, however, saw another attack of subperiosteal inflammation and suppuration; this time in the middle of the shaft of the left tibia, which was found bare for three inches after an incision had let out at least an ounce of pus. This focus of inflammation had no discoverable connexion with the original one at the upper end of the same bone, and was, I feel sure, quite distinct from it. The rapidity with which pus had been formed in all these places was most extraordinary. Detailed description is no longer necessary. There were no more abscesses, and the four wounds healed without further suppuration and without implication of bone. The boy began to put on flesh, and when he left on July 23rd, with the wounds quite healed, his appearance was very different from that seen on his admission.

It would be wrong to call this a case of pyæmia, but the

inflammation was clearly infective, and in the treatment regard was paid to the general as well as the local condition. The wounds were most thoroughly purified, but, in addition to this, every effort was made to improve the boy's nutrition, and thereby to augment the resistant power of the tissues and fortify them against further activity of the opposing virus.

DIFFERENTIATION IN RHEUMATIC DISEASES.[1]

By HUGH LANE, L.R.C.P. &c.,

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IT may be regarded as a truism to say that, as the empire of medical science gradually widens its bounds, some of its departments which have in the past attracted but too scant a measure of serious notice are now beginning to receive the attention which is their due; and as in every department of human knowledge the synthetic method precedes the analytic, it is only when we pass from the stage of dealing in broad and general definitions and arrive at that of differentiating and classifying that we can truly say that a subject of this kind has begun to be properly grasped. And in the case of chronic rheumatic diseases so called, the time is not so very far distant when the employment of the single term "rheumatism" was held sufficient, not only as a definition, but as an explanation of numerous other diseases, which it is now found cannot be either diagnosed or cured by the device of merely comprising them under one common term and treating them all alike. It has, therefore, to be kept in view, in approaching the special study of rheumatism, that before grappling with it in its numerous and distressing forms, these must be scientifically detailed and classified by the same methods by which all scientific knowledge is reached—viz., inductive reasoning based upon extensive and minute observations.

Time was when to the old, the poor, and the overwrought, rheumatism seemed to be the natural and expected conclusion to a life of trouble only capable of being mitigated by the warm clothing which charity might supply, or by proximity to a friendly fireside. It was not provided for or guarded against until its presence made itself felt, for it was looked upon as *kismet*, a thing that could not be avoided; and the idea of preventing its approach, of looking for constitutional symptoms, or, in fact, attempting anything beyond the mere alleviation of its pain when once the victim was in its grip, was a thing unheard of. We see the burden that lies upon us to relieve these victims, to make life more tolerable for them and better worth living—in fine, to demonstrate to them that something is possible for them beyond mere physical existence, encumbered with pains and discomforts, and to teach them the truth and the meaning of that pregnant aphorism of antiquity, "Non est vivere sed valere vita." It will not, I trust, be looked upon as extravagance to say that by the increase of careful unremitting investigation into the various kinds of rheumatic diseases, especially with regard to their early and curable stages and the marks by which they may then be recognised, a better and higher result will inevitably be reached—viz., that in good time such symptoms and such effects will no longer be visible, and we shall no longer have amongst us the crippled frames we so frequently see and the lives of misery which are so often transmitted to an enfeebled posterity. This consummation, so devoutly to be wished, is, I fervently believe, no visionary's dream of the future, but is an actuality almost at hand. It is with such a result in view, and with the hope that the present proceedings may in some small degree contribute to it, that this paper has been written and the subject brought to the front. Its object is to endeavour to throw some further light upon the doubts which exist as to what the differences are between the varieties of rheumatic diseases so-called. By these I mean the diseases to which the terms "chronic rheumatism," "rheumatoid arthritis," "rheumatic arthritis," and what is more popularly known as "rheumatic gout," are applied. A few months ago a work on this subject appeared by myself, in conjunction with my friend, Mr. Charles T. Griffiths, in which we set forth our opinions, based upon our experiences, and which were almost purely clinical observations. Although it cannot be hoped to better to any considerable extent those advanced in life who are suffering from a rheumatic affection, in spite of our utmost wishes and endeavours to do so, the subject which we think ought to hold a position of greater prominence than it does is that of giving attention to the early interference in the same disease or in one of those related to it, whether it be in a patient a little younger or much younger. For our experience has been that the tendency for the rheumatoidal element to develop in young persons is terribly on the increase. The result of these observations has been to convince us of the following: that the difference between rheumatism and rheumatoid arthritis is of a greater and far more extensive character than the text-books would lead to believe; and so markedly have clinical facts impressed this truth upon us that the occasion is gladly grasped to explain the results of our research. Fortunately for the success of our cause, our paths have led us into regions where rheumatism, rheumatoid arthritis, and rheumatic arthritis are grouped together for special treatment. In the Royal Mineral Water Hospital at Bath can be seen any day these diseases in all their phases, and with all their distinguishing differences, at any age and in every stage.

It must strike as being suggestive that we should have mentioned rheumatoid arthritis and rheumatic arthritis separately; the reason for so doing will presently be made evident. But, first of all, let us look at rheumatism as compared with rheumatoid arthritis. This condition of chronic rheumatism is usually regarded as a most frequent one, but experience has shown that many of these cases of chronic rheumatism so-called, if inquired into more deeply, will prove to be one or other of the supposed allied diseases to be described later. When the sciatic nerve is attacked by rheumatism we call it "sciatica"; when the lumbar muscles, "lumbago"; when certain nerves, we employ the term "neuralgia"; and yet all, in spite of their change of name, claim a share in their relation to chronic rheumatism. We do not mean to offer any objection to this arrangement—it is, in fact, by adopting this quasi-complication we come to simplification; but when the term "chronic rheumatism" is used, it seems to me that it could not be utilised for better and clearer designation than in those cases in which the joints are painful but not swollen, or in which there is a neuralgia or even arthralgia associated with myalgia, or apart from it; or in which the various fasciæ are affected, or in which there is a general neuralgic condition supervening on an acute attack of rheumatism. This is what we prefer to call "chronic rheumatism." But in speaking of the symptoms of rheumatoid arthritis, I will make reference to those symptoms which are sometimes put down as common to both. Let us imagine two patients sitting side by side, one with chronic rheumatism and the other with rheumatoid arthritis. Now, what do we see? In the rheumatoid arthritis case the first thing that strikes us is most probably the pallor of the patient, as compared with the chronic rheumatic. We look a little closer, and the next thing we perceive will most probably be the joints. The patient with chronic rheumatism will present in this feature little or nothing; whereas, on the other hand, the rheumatoid arthritis patient will be more or less crippled. There will be distinct muscular atrophy in the rheumatoid arthritis case, and the complexion will present the pallor mentioned before, showing on closer inspection yellowish tinges on the face, neck, and perhaps elsewhere. If we ask both patients if they ever had rheumatic fever, they both will probably say No; but further inquiry will elicit the probable fact that the family history of the patient with rheumatism will be a good one, or perhaps at the most a rheumatic one, while the rheumatoid arthritis patient in most cases gives or shows a strumous taint. It is upon the basis of this strumous taint that we feel we must look for further assistance to guide us in the treatment of this terribly crippling malady. It is nearly always present more or less. We are aware that this strumous history has not been particularly referred to in other descriptions of the disease. It being the almost invariable accompaniment has induced us to bring the matter forward. In fact, to look upon struma and rheumatoid arthritis as cause and effect has seemed to us the one plain characteristic in our investigations. Space does not allow of our going far afield for instances in support of the truth of this: the facts we

[1] Being the substance of a communication read before the Bristol Medico-Chirurgical Association on May 14th, 1890.

have stated have been so palpable and the distinctions at once so clear that perhaps it is wholly unnecessary. We would, however, make one exception and give one circumstance in support of the theory. Take, for instance, the disease known as Charcot's disease: we see the condition which prevails in the joints, and on further inquiry we find a tabetic history. It is not for us to assert that the tabes and joint disease are cause and effect; but when we find a patient with a personal or family history of scrofula, struma, or tabes suffering from an affection of the joints in which no pre-existing attack of rheumatism can be proved, are we very wrong in believing there is such a thing as cause and effect in the case we have before us?

Now, why have we mentioned rheumatoid arthritis and rheumatic arthritis as two distinct diseases? For the following reasons. Rheumatic arthritis is, we consider, an arthritis produced by rheumatism, be the attack acute or subacute. It may be asked now, Then what is chronic rheumatism of a joint when it supervenes on an acute attack? Is it rheumatic arthritis? In the strictest sense of the term it is; but what concerns us is not so much the difference between chronic rheumatism supervening on an acute attack with little joint affection and chronic rheumatic arthritis supervening on an acute attack with considerable joint implication, so much as the difference between chronic rheumatic arthritis and chronic rheumatoid arthritis.

I assert at once that the main difference is in the cause, and I shall also at once say that the main difference does not stop short at the cause. In these rheumatic arthritis cases we shall find that the characters—that the physical characters of the joints implicated—present a very considerable difference; there is frequently a flexion and fixation in the phalangeal joints, accompanied by a swelling which ends abruptly above and below each joint, whether in those fixed or not, which is not observable in rheumatoid arthritis, for in rheumatoid arthritis the swellings have strong inclinations to be spindle shaped—that is, graduating into the normal parts. It seems a singular fact that the proximal phalangeal joints of the second fingers are the favourite ones attacked in rheumatoid arthritis, and if a monarthritis, still more so is it the case. In rheumatic arthritis we have found a monarthritis more the exception than the rule. Among the leading characteristic constitutional symptoms of rheumatoid arthritis may be mentioned the following: general weakness, anæmia, emaciation, loss of appetite, arthralgia, lassitude, and the various typical neuroses, which we have described elsewhere. We do not deny that these distinctions are sometimes so ill defined as to forbid us deciding upon an arbitrary classification, especially where we find a case of acute rheumatism occurring in a patient suffering from rheumatoid arthritis, or in which it has previously occurred. Here we often see the leading features of both rheumatic and rheumatoid arthritis displayed in the same individual, and yet so satisfied are we with the proof, that in these cases we hold the patient may be suffering from both diseases distinctly; this we unhesitatingly call a "mixed case." Again, in rheumatic arthritis the swellings, although positive enough in themselves, can be characterised by many negative signs; for instance, there is not the thickening of the capsule to the same extent as in rheumatoid arthritis, and then there is no effusion; the swellings seem to be due to the intra-articular cartilages and capsules combined. When emaciation occurs, as it so frequently does in these cases, the condition of joint deformity is well seen. Taking, for example, the metacarpo-phalangeal articulations which are so frequently affected, so much disorganisation of joint structure takes place that distinct dislocation of the heads of the phalanges is noticed, causing the heads of the metacarpal bones to stand out, exposing about two-thirds of their articular surfaces; this seems to be the condition when disorganisation of tissue has taken place; but when disease has occurred and an attempt at organisation has gone on, adhesions have formed, and the joints are apparently ankylosed. In these cases the swellings are still less marked, it being quite common to observe no departure from the natural size, and yet, perhaps, the joints are moulded together, producing an actual condition of synostosis. What diagnosis are we to put upon the results of acute rheumatism coming on in a patient already suffering from a previous arthritis which has had its origin in a more or less obscure manner? That must depend upon the ultimate clinical appearances prevailing. An important consideration here presents itself. Assuming that the patient in this recent attack of acute rheumatism develops cardiac mischief, will not the effect on the progress of the resulting disease be regulated in proportion as the cardiac lesion is severe or mild? First of all, the action of a heart more or less rendered arhythmical by endocarditis or myocarditis upon a case of rheumatoid arthritis. The most important thing is, perhaps, the fact that tissues, especially muscular ones, already impoverished by the causes of rheumatoid arthritis, now lose another of their sources of nutrition by obstructed blood-supply; possibly there may be pulmonary congestion or regurgitation with mal-aeration. That these complications do in any way produce a separate and distinct pathological condition as a result of combined forces is not evident.

Hands of A. P——. Admitted Jan. 7th, 1889. Fifteen years previously he developed rheumatoid arthritis in several joints of both hands. This went on for two years without much change, and then he had an acute attack of rheumatism, after which the joints gradually assumed the above appearance. The above illustrates a good example of the typical deformities of a "mixed case."

The conclusions which I think must be drawn from clinical practice must be stated at the outset to be that rheumatism and rheumatic arthritis are about as distinct from rheumatoid arthritis as they can possibly be. It may not be out of place to refer to the term "rheumatic gout," which seems to be the favourite term in some of these conditions. Could any term be more misleading when it is intended to convey the idea of a single affection? It at once suggests a combination of two separate diseases—rheumatism on the one hand, gout on the other. And yet over and over again we find a patient affected at any period of life in which there has been neither the slightest history of rheumatism nor the slightest history of gout, and there is no hesitation shown in at once determining the case as one of rheumatic gout. It may be excusable for a patient, especially one

having no connexion with the profession, to use such a term; but for the reasons just stated, does it not seem to be an extravagent departure from the plain facts of medical nomenclature? It has been our rule to speak of osteo-arthritis not as a synonym for rheumatoid arthritis, but as an advanced condition of the latter, when bony implication has been distinct enough to merit the use of the Greek word "osteo." By bony implication we mean eburnation, osteophytic outgrowths, enlargement, flattening—in short, the later stages after the elastic swelling of the soft tissues has manifested itself. It may be satisfactory for us or anyone to be able to grasp the precise condition, clinical or pathological,[2] or both, of the cases which present the appearances we have described, but when it comes to a question of treatment we must confess that the success has been proportionate to that which is obtained in the treatment of struma or phthisis—a fact which may go some way to further the theory advanced by us of the association between these diseases and rheumatoid arthritis. In point of fact, the treatment which is adopted for the former we have found to be the most serviceable for the latter. When inflammatory adhesions have formed, the question of passive movement has, we have found, been better answered by somewhat more forcible means than have hitherto been laid down. Cases have passed through our hands which have presented themselves with knees flexed, bringing the legs nearly to a right angle with the thigh, which, under chloroform, have been forcibly extended, treated in the orthodox way, and the patient has been placed in a position in which he or she has been able to exercise his or her locomotive powers, instead of passing day after day and week after week a miserable bedridden cripple. The treatment of rheumatic arthritis must be carried on in proportion as the amount of rheumatism is or has been present. If a mixed case, a mixed treatment would be indicated; in short, that element which prevails must be combated by that particular style of treatment which we have elsewhere shown to be the most beneficial.

The after results in all cases will be decided to no inconsiderable extent by the mode of life which the patient pursues, and unfortunately, in so many of the cases from which we have derived so much valuable and interesting information, satisfactorily as they may have been turned out of hospital at one time, have appeared some months later suffering from an aggravation of the symptoms—often so clear as to show that only over-fatigue and often a forced disregard or a self-imposed disregard of rule has taken place; but at the same time it must be admitted that necessity has compelled them to pursue avocations so unconducive to a more satisfactory end. All will allow that this is not a fatal disease, and all must admit that the facilities for gaining information of pathological importance are difficult; but if clinical material is plentiful and if facilities for treatment are at hand, it must also be admitted that we have at least gained two-thirds of the battle. Perhaps the greatest lesson to be learnt from these troublesome complaints, especially rheumatoid arthritis, is to be suspicious and take it in time, by adopting what we have attempted to show is the most desired means. Early interference will often thwart its progress and its accompanying ravages.

In conclusion, let me sum up what we believe to be the result of the preceding observations. We have to the best of our ability endeavoured to show: first, what is the nature and characteristics of the diseases which we are combating and the marks by which they can be recognised; secondly, the methods of treatment by which their ravages are to be met and relieved, or neutralised. We have not attempted to dogmatise upon the subject; we have merely brought forward the fruits of laborious, and we trust we may venture to say to some extent original, investigation. In this paper we have not sought to claim any merit for whatever we may have attempted to contribute to the fuller discussion of the subject, for we cannot forget that all contributions made towards medical science, and every fresh ray of light cast upon it, are, in the phrase of one of our greatest philosophers, but the picking up of pebbles by the shore of the ocean. If we should succeed in warding off or postponing indefinitely the serious results which we all know too well, we should indeed have accomplished a humane feat; if not, we can take to ourselves the satisfaction that we have done our best in trying.

Bath.

[2] The pathology of these diseases was most carefully investigated in an article in the Pathological Society's Transactions for 1886, by my brother, Mr. W. Arbuthnott Lane, M.S., F.R.C.S.

NOTES AND REMARKS ON UPWARDS OF FORTY OPERATIONS FOR CANCER WITH ESCHAROTICS.

BY OWEN PRITCHARD, M.D.

IT is not my object to advocate the use of escharotics instead of the knife for the removal of malignant disease. I believe, however, that I am in a position to prove that they may be used with great advantage and with almost absolute safety in some few cases where the knife is not so suitable, and that in a greater number of cases they may be used, if desired, instead of the knife, giving very satisfactory results. Very large tumours, involving, say, the whole of the female breast, may be completely destroyed in a few hours practically without pain from beginning to end, and without any constitutional disturbance whatever. I therefore propose to give as concisely as possible the results of upwards of forty operations of this kind performed by myself during the last two years. Bearing in mind the amount of quackery and dishonest practice that has been carried on in all parts of the country by charlatans and cancer-curers, and sometimes even by qualified practitioners, in the "burning treatment of cancer," I have endeavoured in the following paragraphs to avoid any kind of theories, and to state the facts as simply and as openly as possible, in the hope that they may in no way lend themselves to the unscrupulous, or lead anyone to suppose that I claim for escharotics anything more than their proper place as adjuncts to surgery. It is the fact, of course, that escharotics are used, and have been used from time immemorial in surgery, and the mode of their application described in all the surgical text-books; but while cutting surgery, owing to the discovery and introduction of anæsthetics and antiseptics, and probably much greater skill and dexterity on the part of the surgeon and more careful attention to all the details of operations &c., has been most deservedly making marked progress during recent years, the surgery of escharotics, if I may venture to call it so, has been quite at a standstill, if indeed it has not even retrograded. If escharotics are to remain and hold any place, however humble, in the surgery of the future, there is no need of any further apology for endeavouring to define the appropriate cases for their use, the best escharotics for such cases, and especially the best and most scientific mode of applying them. It is hardly necessary to mention that a large percentage of malignant tumours cannot be removed by escharotics, and must therefore be removed by the knife, and that there is a still much larger percentage where the tumours, although removable by escharotics, are much more expeditiously treated by the knife in the ordinary way. It is here that considerable experience and a great deal of care are necessary on the part of the surgeon, to determine what is the best advice to give to his patients, and, having given that advice which he considers best, to know how far he must insist upon it, and how far he may consult the wishes of his patient in the matter without at the same time descending into unorthodox or unprofessional practice. Unless my experience differs widely from that of other practitioners, it is not a very uncommon occurrence for patients to decline to undergo a knife operation, and, when that is insisted upon, they leave and "try another doctor." Thus most valuable time is lost whilst the suffering patient is going from doctor to doctor, until, alas! it is too late for any surgical interference whatever. I have not found this difficulty with escharotics, and it is questionable whether a surgeon would be consulting the best interests of his patients by absolutely declining to use escharotics in such instances as the above, even though he may believe that a knife operation would be more suitable, for it will probably be admitted on all hands that the complete and early remove of cancerous tumours is of more importance than any other consideration.

It is not necessary for me to trespass on valuable space by describing the composition and mode of application of such escharotics as the Vienna paste, the chloride of zinc or Fell paste, the arsenical paste of Bougard or the arsenical mucilage of Marsden, &c.; these are already well described in various text-books and the mode of their application widely known. They are most useful in small tumours, such as epitheliomata of the face, vulva, &c.; but in spite of all that has been said in their praise by their various champions, they are at the best painful and very tedious applications,

and the patients should be kept under the influence of sedatives while they are applied; whilst on account of their slow action they are not nearly so useful in large tumours, such as we often meet with in the breast, especially if those tumours are very rapidly growing. I have known two instances of such tumours actually gaining upon the operator, being no doubt stimulated into extra activity by the irritant escharotic. One was a case under my own care, and I was obliged to resort to other means for its removal. The other was a lady who had been under chloride of zinc paste for eighteen months, and I was informed that the tumour was larger at the time of my visit—when it certainly was very large and extending up into the axilla—than it was at the commencement of the operation.

In such cases as the above—in fact, in all large tumours of the breast—the Michel paste is, in my opinion, infinitely superior to any of the other escharotics. It will do as much work in one hour as any of the others will do in a week. When properly applied and in favourable cases, it will destroy completely the largest tumours of the breast in eight or ten hours, and with care it may be so managed that the patient should feel nothing whatever of it from beginning to end. Neither the composition nor the mode of application of this valuable escharotic is, as far as I know, described in any text-book on surgery, and consequently it is hardly known to the profession. It is therefore necessary to describe this more carefully. The paste consists of one part by weight of asbestos cut small and rubbed down in a mortar or between the hands into fine powder, to three parts by weight of Nordhausen or fuming sulphuric acid, mixed together into a paste on a glass or porcelain slab, with a silver, or, better, a glass spatula. This acid must not be confounded with the pure sulphuric acid mentioned in some text-books. They differ widely, both in their composition and in their action. The latter is an exceedingly painful application, and simply chars and hardens the tissues, while the Nordhausen acid is not nearly so painful, and under its powerful hygroscopic action the tissues almost disappear, and what remains of them becomes a soft cheesy non-adhesive mass of cells which crumbles away when touched. The Nordhausen acid is not a definite chemical compound, but a mixture of sulphuric acid and sulphuric anhydride ($H_2SO_4+SO_3$). It should have a specific gravity of 1·9, that of pure sulphuric acid being 1·84. It is a very delicate and unstable preparation, and unless very carefully manufactured and preserved it is apt to become crystallised into a solid mass. It absorbs water so rapidly from the air that, if exposed for a short time, it becomes quite useless as an escharotic. It will thus be easily understood that the paste must be made fresh for each application.

I cannot describe the mode of applying the Michel paste better than by giving my notes of a recent case which I think illustrates a suitable subject for such treatment, and also a very successful operation.

Mrs. F——, sixty-eight years of age, has had a slight induration in the right breast since the birth of her first child, but no pain or trouble until three or four months ago, when it began to grow very rapidly, and soon involved the whole of the gland. The nipple was retracted quite out of sight, and an area surrounding it of about two square inches was ulcerated, and was the cause of frequent hæmorrhage. The skin was drawn in and adherent nearly all over the tumour. Movement upon pectoral muscles was very limited. No enlarged glands detected in axilla. On the evening of May 17th, 1890, the tumour was well painted over with blistering fluid, and the patient was given a one-grain opium pill. On the morning of the 18th the epidermis over the blistered area was easily removed, leaving a raw absorbing surface, over this a small quantity of the hydrochlorate of cocaine was applied. This surface absorbs cocaine so rapidly that I have seen on several occasions constitutional symptoms produced within two or three minutes after its application. It is therefore necessary to be very cautious about the quantity that is applied. I think it hardly safe to use more than a grain to a grain and a half. At the same time one-sixth of a grain of morphia was injected hypodermically. After waiting about ten minutes for the cocaine to become absorbed, a cake of the paste, freshly made, about an inch thick, and sufficiently large to cover the whole of the tumour, was applied. It usually takes from ten to twenty minutes for the Michel paste to destroy the skin, and during this time the patient suffers intense pain unless cocaine is used. This pain also ensues with any other escharotic. In this case, however, the patient absolutely did not feel it, and by the time the local effect of the cocaine was passing off the skin had been destroyed, and the hypodermic injection was beginning to have its proper effect. The patient was happy and comfortable and quite free from pain throughout the day, and on two or three occasions dozed off to sleep for a few minutes. The paste was applied at 10.30 A.M., and the tumour, which was found to extend considerably into the pectoral muscles, was completely destroyed by 5.30 P.M. without the loss of a single drop of blood. The cavity was cleaned out and filled with asbestos, covered over with lint and zinc ointment, and then left for the night. The patient slept well that night, sat up next day, and has since recovered remarkably well. She has had no rise of temperature. Her appetite and general health have been quite unaffected throughout.

It usually takes about twelve days for the eschar to separate, and during the latter part of this time the wound should be well syringed twice a day with a weak solution of permanganate of potash or some other disinfectant, dusted over with iodoform, and poulticed. When the eschar does separate, it leaves a healthy granulating surface, which heals up rapidly. In applying the paste, great care must be taken to place the patient in such a position, by means of pillows and supports, that the tumour is exactly level; otherwise the acid of the paste will gravitate to the lower side and destroy that portion only, leaving the bulk of the tumour untouched. Owing to the rapidity with which the acid absorbs moisture from the tissues and from the air, an oozing of fluid takes place all round the paste within a short time of its application, and this must be most carefully sopped up as it exudes with small pieces of blotting-paper or fine linen, otherwise it will run over the surrounding skin and cause unnecessary pain, and to guard against any accident of this kind the skin around should be painted over with collodion. The position of the patient and the sopping up of this fluid are so important that only the most intelligent and reliable nurses can be trusted to watch the case. By removing the paste and cleaning out the cavity, it is quite easy to see at any time how the operation is progressing; and if any doubt exists about the nature of the tumour the diagnosis may be confirmed. The complete destruction of the tumour may be accurately ascertained in a similar way. In doing this it is necessary to avoid rash interference so as to escape injury to the large arteries often found in the neighbourhood, and it is always prudent to have a few artery forceps at hand. No hæmorrhage will occur unless after some interference, and in such event the artery must be ligatured; or, better, the forceps left on under the paste and the operation proceeded with as before. It is impossible to make it positively certain that the process in all cases can be completed in so short a time, or that it will be quite so devoid of pain as it was in this instance; but with proper care this should represent a fair type of the majority of such operations. The following case will serve to illustrate those conditions in which it is difficult to perform a knife operation, and for which escharotics are so well adapted.

Miss R——, aged sixty-five, had a very large tumour in the left breast, which had been growing for several years. It was firmly fixed to the ribs, and extended upwards towards the axilla, the tissues being retracted in that direction, but no enlarged glands could be detected. There was a very large ulcer, which often bled freely. The left arm had been for several months enormously œdematous. Owing to the constant pain and frequent loss of blood the patient's health had become very feeble. The Michel paste was applied on Aug. 9th, 1888, and again on the 10th, for a few hours. The tumour was found to extend as deep as, and even between, the ribs, so that it was necessary to destroy a portion of the chest wall in order to remove the whole of the tumour. On the evening of the 12th the temperature went up to 101°, but on the 13th it was normal again, and remained so throughout. With this exception there was no constitutional disturbance, and the patient's general health began to improve almost directly. In about twelve days, when the eschar had separated, it was found that portions of two ribs, about three inches long, were exposed and denuded of periosteum on the whole of the outer surface.

This being the first case of the kind I had seen, I must confess that I felt rather alarmed and anxious to see what would become of the dead bone. In a few days, however, my anxiety was over, for I found that the outer and dead layer of the ribs began to scale away and separate almost as quickly as the other tissues. The wound granulated

healthily and healed up rapidly. In a very short time after the operation the œdema in the left arm completely disappeared, and the patient still remains free from return. On several subsequent occasions I have found it necessary to destroy the chest wall, but never found trouble of any kind to follow.

The next case is typical of another class, which I think are equally well treated with escharotics as with the knife.

Mrs. D——, aged sixty-six, noticed a small swelling in the right breast last January, which grew very rapidly. When first seen by me nearly the whole of the gland was involved. The skin was adherent all over the tumour, and ulcerated over a considerable area around the nipple, which had been destroyed. On all sides of the tumour the skin, especially on the inner and lower part, over an area of seven inches from right to left and five inches from above downwards, was thickened and studded with cancerous nodules. Similar nodules could be felt in the deeper tissues. No glands could be detected in the axilla, and the tumour moved slightly upon the pectoral muscles. This case was kindly seen for me by a well-known authority on external cancers, and he described it as "a degree of Velpeau's cancer *en cuirasse*." Michel paste was applied on June 1st, 1890, in the usual way, and left on for six hours. It was again applied on the 3rd, and left on for four hours, when the whole of the tumour and the nodules in the surrounding area were, as far as could be ascertained, completely destroyed, and the progress of the case up to the present has been quite satisfactory.

In addition to such cases as the above, escharotics are especially suitable for very delicate, nervous, or old people—persons with any cardiac or other disease which may render them unfit for anæsthetics, those also in whom it is of importance to avoid loss of blood or any shock to the system. Palliative operations may also be performed for the removal of large ulcerating and sloughing masses. In very advanced cases the patient's health greatly improves and life is prolonged by the removal of the offensive tissue. On two or three occasions I have been persuaded to remove tumours of the breast with caustics when the axillary glands were at the time enlarged, and afterwards to open out the axilla with the knife under an anæsthetic in the ordinary way, and remove those glands. I am not, however, prepared to defend such a practice, seeing that one knife operation for the whole would involve no greater risk than that for the axillary glands alone; its only justification is to be found in the fact that some women will consent to this process who will not consent to a primary knife operation. The number of patients treated with various escharotics was thirty-eight, and the number of operations forty-three. Of these, three had parotid tumours, recurrent in each case after knife operations; and six were epithelial growths, two on vulva, one being recurrent, one on lip, and the other three on different parts of the body.

The time is too short and the number of these operations too small to be of any statistical value at present. So far, however, there is no recurrence in any, except in one of the parotid cases. This was the case of a poor man who had been previously treated for the same disease at Guy's Hospital. He had there undergone two operations within a few weeks, the second being for a recurrence. I removed a second recurrence on April 2nd, 1889, and he went on well for six or eight months. When last seen, however, he was in a very bad state. The remaining twenty-nine were tumours of the breast, one of which I have not seen or heard of since. I therefore think it best to leave it out of the calculation, thus bringing the total number of breast patients to twenty-eight. Two had tumours in both breasts, and in each case the whole of both glands had to be removed. Two had recurrences, and a second operation was in both cases necessary, making the number of operations thirty-two. Out of this number twelve were treated from eighteen months to over two years ago, and seven of the patients are now free from a recurrence, including one who had both breasts removed. One has a local recurrence at the present time; one died of secondary deposit in the liver; one of tetanus, eight months after operation for recurrence; one from chronic bronchitis and asthma; and one from acute bronchitis. The last two were attended by other medical men. I had, however, suspected some malignant mischief of lungs in both cases some time previously. Ten patients were treated from twelve to eighteen months ago. Seven are now free from recurrence, including one who had both breasts removed. One was a palliative operation only and the patient's health has been much better since; two died of cancer of liver and distant glands. There were no local recurrences in any of these. The six cases treated during the last twelve months are free up to the present time. I might mention that in all the twenty-eight cases the malignant nature of the disease was almost as certain as in those particularly described, and the diagnosis was verified in nearly every case by other surgeons.

Escharotics have many disadvantages as well as some advantages, and these should be carefully weighed, having regard to the nature of the tumour, its position, the general health and age of the patient, &c., before advising any particular treatment. I have endeavoured throughout to avoid any partiality, and I by no means share the extravagant views of most of those who have been in the habit of using escharotics. I think, however, that the immunity from recurrence so often claimed by these enthusiasts deserves a more careful study than it has hitherto received by trustworthy observers. Judging from my own cases, even after making a very liberal allowance for errors in diagnosis, the small number of local recurrences is very remarkable, while there is no such marked absence of secondary deposits in distant organs. If we admit that there is a difference in this respect, the natural question is, What is the explanation? My answer is that I do not know, but with caution and reservation I venture to suggest the following: 1. It is well known that local recurrences after knife operations nearly always begin as small, hard, and well-defined nodules on the very edge of the scar, being partly in the normal and partly in the cicatricial tissue. Attention has been drawn to this fact recently by a number of our most eminent surgeons, and they suggest that the operation should be of a more sweeping character. 2. It is also highly probable that cancer can be inoculated. 3. Is it not equally true that surgeons seldom complete the removal of malignant tumours before the operating knife cuts into some portion of it, and that therefore the blade of the knife must get covered with cancer cells, juice, germs, or whatever the substance may be that inoculates? Completing the operation then with the same blade, it is easy to conceive that some of the inoculating material would be left embedded in the healthy tissue, in spite of careful antiseptic washing, and the wound closed up with all the original tumour most carefully removed, but with the germ of the recurrent disease unintentionally as carefully sown in good soil.

Southwick-street, W., June 20th, 1890.

NOTE ON EXTRA-GENITAL SYPHILITIC CONTAGION.

BY ARTHUR COOPER, M.R.C.S., L.R.C.P.,
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THAT syphilis is not necessarily a venereal disease is of course a very well known fact; but as it is not always remembered in practice, the following cases seem worth a brief record, especially as, taken together, they include most of the points that are of importance in connexion with the subject of extra-genital syphilitic contagion. Five of the patients came under my observation at the Westminster General Dispensary and one (No. 5) in private practice. The cases are reported as briefly as possible consistently with their diagnosis. The space at my disposal does not allow the subject of treatment to be entered on in the present communication.

CASE 1. *Initial lesion on the nose.*—Mary M——, aged ten, was brought to me on July 24th, 1885, with a sore on the nose, which was said to have appeared only on the previous day, though two days before that a lump had been noticed on the left side of the neck. On examination, there was an angry looking, but not painful, sore occupying the left ala nasi and sulcus between the nose and the cheek; the edges of the sore were raised and smooth, and there was well-marked induration of its base. There was also a smooth, hard swelling beneath the jaw on the same side. The skin was free from rash (except fleabites), and the mucous membrane of the throat and mouth healthy. No history bearing on contagion could be obtained. On the 31st, under the use of iodoform, the sore had become smaller and dry on the surface. On August 21st the sore was covered with

a thick scab. Two separate indolent glands could be felt beneath the jaw. On the 25th the scab had fallen, and the sore had nearly healed. On Sept. 1st the sore had healed, and its site was occupied by a typical warty growth. Roseola was present on the chest and upper abdomen. On the 8th the roseola had disappeared, with the exception of one spot; the throat and mouth remained healthy; the papillomatous growth had nearly gone, leaving a smooth pink surface. The child was not seen again.

CASE 2. *Initial lesion on the breast.*—Henrietta I——, a Jewish child aged two years and a half, came under treatment on November 20th, 1885, on account of a sore on the right breast, which her mother had first noticed as a pimple a week before. On examination there was a superficial ulcer on the right nipple and its areola, but with no perceptible induration. A hard, indolent, movable gland could be plainly felt in the right axilla. On the 27th the sore had healed, and the scar was distinctly indurated. The gland in the axilla remained as before. There was no rash. The child was not seen again until January 5th, on which date the cicatrix was still indurated, and the gland in the axilla was smaller. There was no rash on the skin, and the throat and mouth were healthy. The suboccipital glands were enlarged, but this may have been due to the dirty state of the head. The inguinal glands were not enlarged. The child was not seen again, so the case remains incomplete in so far that constitutional symptoms were not actually observed; but the early rash might well have come and gone during the interval of nearly six weeks which elapsed between the last two visits.

CASE 3. *Initial lesion on the tongue.*—G. W——, aged twenty-eight, a kitchen porter at a club, was sent to me by Mr. Tudge of Gerrard-street, who had already diagnosed the nature of the case, on March 22nd, 1887. The history the patient gave was that a sore had been first noticed on the left side of the tongue seven weeks ago, and that from four to seven days afterwards a lump appeared behind the jaw on the same side. He had had several attacks of gonorrhœa, but never a venereal sore. He could not in any way account for the sore tongue, and no one of his fellow-servants had a sore mouth or spots on the skin as far as he knew. On examination of the tongue, there was seen on its left side near the tip an oval ulcer, measuring a quarter of an inch in its long diameter, with raised regular, not undermined, edges, and a decidedly thickened but by no means typically indurated base. The sore was painful when touched. There was an indolent swelling about the size of a pigeon's egg beneath the left jaw, and a few enlarged glands could be felt behind the sterno-mastoid. There was no sore about the genital organs, and the skin and mucous membranes were free from rash. Mercury was prescribed. On March 25th there were a few papules on the abdomen, chest, and thigh, and on the 29th there were more papules, some being scaly on the surface. On April 5th there was an enlarged gland in each groin. On May 3rd erythema and erosions of the fauces were noticed. The primary sore did not heal entirely until June 3rd. Subsequently the glandular swelling beneath the jaw suppurated, and left a troublesome sinus, which did not finally close until nearly the end of the year.

CASE 4. *Initial lesion on the hypogastrium.*—H. M——, aged twenty-three, who said he had never had any venereal disease nor run any risk of contagion since his marriage seven months ago, came under notice on May 6th, 1887, on account of a sore which he said had followed a pimple from which he had scratched the head whilst using a public bath on April 24th. The sore in question was found to be situated on the lower hypogastric region, about two inches above the root of the penis and a little to the left of the middle line. Being on a hairy part of the body, the sore was covered by a thick scab. It measured half an inch in diameter, and at first sight did not present any of the usual characteristics of a syphilitic lesion. There was a certain amount of inflammation around it, owing to neglect of cleanliness. On removing the scab and cutting away the hair, an inflamed suppurating sore was revealed, but at this time induration was not clear, being masked by the surrounding inflammation. There was one hard gland in the right groin only. There was no lesion of any kind on the penis, and the skin and mucous membrane generally were free from rash. On May 10th, the sore having been kept clean and dressed with iodoform ointment in the meantime, the inflammation had subsided, and induration was clearly marked. Another enlarged gland could be felt in the right groin. The further history of the case, up to August 12th, when the patient ceased to attend, need not be detailed. Roseola, followed by a papulo-erosive syphilide and lesions of the mouth and throat, appeared in due time, and the disease, under mercury, was pursuing an ordinary course when he was last seen.

CASE 5. *Initial lesion on the chin.*—J. D——, aged thirty-nine, who had been treated for an attack of syphilis some years before, on or about July 23rd, 1887, noticed a pimple beneath the chin on the left side. He picked the head off the pimple, and then a scab formed, and beneath it a sore which had gradually been increasing in size. When I saw J. D——, on August 18th, there was beneath the jaw on the left side an oval sore about an inch long and three-quarters of an inch wide, with raised smooth margins and distinctly indurated base. The surface of the sore was covered by a very thin semi-transparent scab. In front of the left sterno-mastoid there was an enlarged and slightly tender gland the size of a small hazel nut, and another, less distinct, in the middle line beneath the jaw. There were no lesions elsewhere. On August 22nd roseola appeared, and this was followed by a papular syphilide on the skin and erosions and mucous patches of the mouth and throat. In September the surface of the primary sore became covered entirely by a warty growth. This was treated by the free application of calomel in powder, and the growth soon withered and gradually fell off, leaving a smooth, pink, indurated surface, as in Case 1.

CASE 6. *Initial lesion on the lower lip.*—J. B——, aged twenty-eight, was first seen by me on July 16th, 1889. The patient stated that for ten years or more he had had, especially during the winter, a crack in the middle of the lower lip. A fortnight ago this crack had become painful, and about the same time two lumps appeared beneath the jaw on the right side. There was no history of any venereal disease; but the man stated that he had been in the habit of going about with a companion who had the "bad disorder" in his mouth, and that the two used to drink beer from the same glass. When the lip was examined, there was found to be a vertical fissure, five-sixteenths of an inch wide, extending along the exposed red portion of the lower lip. The surface of the sore had a characteristic glazed appearance, and induration was clearly marked, especially at the lower part. There were two enlarged glands beneath the right lower jaw, and a few roseolous spots on the chest and abdomen. The penis was free from lesion of any kind, and the inguinal glands were slightly enlarged. The roseola soon became more profuse, the glands under the jaw became larger and harder, and on the 23rd there was on the inner surface of the lower lip a typical mucous patch joining the original sore exactly where the two lips came in contact with each other. On everting the lip, the contrast between the almost dry and glazed surface of the lesion on the part of the lip exposed to the air and the opaline moist appearance of that within the mouth was very striking. The patient ceased to attend after a few weeks.

Diagnosis.—In the diagnosis of extra-genital as of genital primary sores attention should be directed to three principal points—namely: (*a*) the general appearance of the lesion; (*b*) induration of its base; (*c*) enlargement of the nearest lymphatic gland or glands. (*a*) The aspect of a syphilitic sore on the surface of the body is liable to vary from several causes. If suppuration be produced by irritation or any other cause and the part be exposed to the air, a scab of varying thickness according to the amount of discharge will form; more especially will this be the case if the surface is covered with hair (as in Case 4), and the scab may require to be removed before the true nature of the lesion becomes apparent. In the absence of irritation and pus formation, the scanty viscid secretion of an exposed syphilitic sore forms a thin coating over the surface, producing a peculiar glazed appearance which is very characteristic. This phenomenon was admirably described by Wallace in an account of his cases of experimental inoculation more than fifty years ago,[1] as giving a "somewhat glassy or semi-transparent" look to the sore. This glazed appearance was well marked in Cases 5 and 6. I have also seen it on the upper lip and on the scrotum; and on the skin of the penis, as well as on the external labia in women, it is sometimes distinct. In sores of this kind also the dusky ham-red (so-called "coppery") colour is usually well marked, as it is also when the initial lesion is of the papular form. The large size of some primary syphilitic sores, especially about the face, is

[1] THE LANCET, 1836–37, p. 620.

a point worthy of note. Cases have been reported in which the exuberance of growth in this region suggested epithelioma. In Case 5 the initial lesion might for a time almost have been mistaken for a malignant growth. Another, and I believe very rare, phenomenon was the warty growth which developed on the surface of the primary sores in Cases 1 and 5. (*b*) The induration of a primary sore is another quality which varies considerably in different cases and in different situations. On the fingers, for example, it is well recognised that typical induration is frequently absent. In Case 3, in which the initial lesion was on the side of the tongue, there was no clear induration, but merely a resistant kind of thickening, and a similar condition was present in a case (not here reported) in which the primary sore was situated in the cleft between the forefinger and thumb on the hand of a medical man. In other, probably in most, cases of extra-genital contagion induration is sooner or later well marked. Rarely induration only becomes apparent after the healing of the sore, as in Case 2. On any part of the body, also, it need hardly be mentioned that induration may for a time be masked altogether by inflammation, whether produced by caustic or by irritation of any other kind (see Case 4). (*c*) Glandular enlargement: The characters of this important diagnostic sign will depend to some extent on the seat of the initial lesion, and we must not always expect to find the multiple, separate, indolent glands that we are accustomed to look for in the case of genital sores. If the lymphatics from the seat of contagion go to one gland, probably only one gland will at first be enlarged; but even in localities where the glands are grouped—the neck and groin, for example—the whole group is not always affected. Again, even in cases where the enlarged glands are multiple, if the peri-glandular tissue be involved the separate glands will be more or less obscured, and a single uniform swelling of considerable size may for the time being be the result. This seems to be very liable to occur in the case of the cervical glands, probably owing to the irritation set up by the almost continual movement of the neck and jaws. It will be noticed that the surrounding cellular tissue was temporarily inflamed in four of the cases given above in which the cervical glands were affected. Finally, it is well known that the enlarged glands are not always on the same side of the body as the sore which gives rise to them. In Case 4, for instance, the only two glands which could be felt were in the right groin, although the sore was to the left of the middle line. Nor is it invariable that a sore on the middle line causes glandular enlargement on both sides (see, for instance, Case 6)

These three characteristics of syphilitic primary sores—general appearance, induration, adenopathy—are the points on which the diagnosis will depend before the period of secondary manifestations, and when the former are not sufficiently well marked, careful watch should be kept for the latter, and especially for the rash on the skin. As regards syphilitic roseola, it must be borne in mind that it is sometimes very evanescent. Perhaps this is oftener the case in children than in adults. In Case 1 but a single spot remained a week after the rash was discovered.

Another point that may be worth remembering is that after the appearance of a papular or pustular syphilide a diagnosis of the initial lesion cannot be made with certainty *per se*. For besides the fact that the initial lesion on a moist surface may assume the appearance of a mucous patch or tubercle, it is, I suppose, a matter of common experience how easy it would be in many cases of papular or pustular syphilide to pick out apparently typical specimens of primary lesions. I well remember a case which shows how easily a mistake of this kind can be made. A lady, whose husband had been dead for some months, was found to be suffering from an eruption on the skin, together with cephalalgia so intense that she had to be forcibly restrained from injuring herself. Besides a well-marked general papulo-pustular syphilide, there was on the right breast a sore which differed in size and appearance from the other lesions, and had, in fact, all the characters of a typical primary sore. There was also well-marked glandular enlargement in the corresponding axilla. Any past or present affection of the genital organs was denied, and the only apparently suspicious circumstance in the case was that the patient had been nursing the child of a friend. It was thus considered most probable that the lesion on the breast already mentioned was the primary sore. Subsequently, however, it turned out that the disease had been contracted in the ordinary way.

In considering the subject of extra-genital contagion it seems impossible to avoid the conviction that very many more cases occur than those that come under medical observation, especially if one thinks of the enormous extent to which syphilis prevails, and of the carelessness and neglect of ordinary cleanliness shown by so many syphilitic persons. But, however this may be, the cases of non-venereal syphilis that are known are quite sufficient to be taken into serious account;[2] and thus the question arises, Whether it is not probable that some, at least, of the not infrequent cases of visceral and other late forms of syphilis in which we fail altogether to obtain any history of earlier signs may not be cases of extra-genital contagion, and whether more light might not be gained by inquiry in that direction? Further, are we not a little too ready to assume that syphilis in childhood or youth must have been inherited? And is it not probable that some of these apparently inexplicable cases might be explained by searching for evidence of accidentally acquired disease?[3]

It would be well if the general public knew more about the danger of accidental contagion, especially by means of lesions of the throat, mouth, and lips. We might then hope to see some very common and dangerous practices less common than they are at present. For example, more care might be taken in the matter of promiscuous kissing, in drinking in common out of the same glass, and in the passing of pipes from mouth to mouth. The omnibus conductor, too, might hesitate before putting into his mouth the dirty coin which may have just left the mouth of a possibly syphilitic passenger; the hanger-on at the door of the theatre might not be so eager to smoke the discarded cigar end—perhaps even the smoker who knew himself to be syphilitic might contrive to dispose of it in such a way that it could not reach another person's mouth; nursemaids might be forbidden to polish with their own saliva the faces of children under their charge; and soldiers and sailors might sometimes forego the pleasure they seem to derive from being disfigured by tattooing. The risk attending this last practice has been abundantly proved. Only last year Surgeon Barker published in the *British Medical Journal* an account of twelve soldiers, out of twenty-three tattooed by one man, who contracted syphilis in this way; and Surgeon Whitehead also recorded five cases of syphilis communicated in the same way among about a dozen soldiers tattooed. In both instances the syphilitic operator had used his saliva in the process. Although the State does not think it worth while to take any measures for limiting the spread of syphilis in other ways, it might at least forbid tattooing in the army and navy.

Articles of clothing of the most various kinds are well ascertained media of contagion. Not long ago a patient of mine with a recent syphilitic sore declared most positively that he had contracted the disease through wearing at a public bath a pair of bathing drawers that had just been used by another man. During the process of shaving also syphilis has been conveyed. In Case 5 the patient had been accustomed to get shaved at a barber's shop, and the disease was most probably caught in this way.

The question of space prevents any further reference to the almost innumerable ways in which syphilis may be, and has been, contracted. Ample information on this and many other points may be obtained from the literature cited in the foot-notes. The important thing everyone ought to know is that the discharges of all the earlier lesions of syphilis, as well as the blood, are capable of transferring the disease whenever or wherever they come in contact with a broken surface.

Old Burlington-street, W.

[2] See, for example, among the more recent literature bearing on this subject:—Fournier: Documents Statistiques sur les Sources de la Syphilis chez la Femme. Annales de Dermatologie et de Syphiligraphie; 1887. Hutchinson: Syphilis; London, 1887. Fitzgibbon: An Address on Syphilis; Dublin, 1888. Pospelow: Ueber Extragenitale Syphilis-infection. Archiv für Dermatologie, Nos. 1 und 2; 1889. Bulkeley: On Unusual Methods of Acquiring Syphilis. Medical News, March, 1890. R. W. Taylor: Some Unusual Modes of Infection with Syphilis. Journal of Cutaneous and Genito-Urinary Diseases, June, 1890.

[3] On this, and, indeed, almost every other, question relating to syphilis in early life, M. Fournier's admirable work, La Syphilis Héréditaire Tardive (Paris, 1886) may be consulted.

PORTSMOUTH HOSPITAL.—The bazaar held recently in this town in aid of the Borough Hospital has been a great financial success. At a meeting of the general committee of the hospital bazaar held at the Town Hall last week, the Mayor presiding it was stated that the net receipts amounted to £1904 7*s.* 7*d.*

CATAPHORIC MEDICATION AND COCAINE AS A LOCAL ANÆSTHETIC.

BY ARTHUR HARRIES, M.D.

THE writer of the leading article which appeared in THE LANCET of Aug. 29th, on Dr. Kümmer's *brochure* upon the use of cocaine hypodermically, lucidly summarises the greater objections to the use of the drug in that manner. To these should be added (1) local irritation, and (2) the possibility of inoculating the patient with syphilis or other disease, from imperfect cleansing of the instrument employed. These risks are inseparable from hypodermic medication. There is, however, no reason why the use of a valuable drug should be discontinued merely because the methods of employing it are unsatisfactory. Dr. Kümmer's plan partially obviates *some* of these disadvantages; but it is open to every objection common to the hypodermic method, and particularly to the grave objection that, after all, the bandages *must* be removed some time or other, so allowing the cocaine solution to pass into the blood stream, and to produce the toxic states described. In a recent case of rachialgia, where I considered it advisable to employ the galvano-cautère in the regions of the lower cervical and upper dorsal vertebræ, I employed the method of passing cocaine into the skin by cataphoresis which I described in a letter to a medical contemporary[1] in December, 1889, under the heading of "Cataphoric Medication." In the case under consideration a 10 per cent. solution of hydrochlorate of cocaine was used; a flannel-padded positive electrode, corresponding in size and shape to the part to be anæsthetised, saturated with the solution; the larger negative electrode (soaked with salt and water) placed in a suitable position (front of thorax); and a continuous current of 25 milliampères passed steadily through the part (without reversals) for forty minutes. As a result, six consecutive applications of the galvano-cautère were painlessly made opposite the intervertebral spaces, each application extending two inches in length by one-eighth of an inch or more in depth. The patient did not flinch, but expressed his perfect willingness to undergo a similar operation again if necessary; this, in fact, he did on two subsequent occasions, the results as regards painlessness being similar.

Here, then, we have a process to which none of the objections raised in the leading article above mentioned, save one, can apply. The persistent objection is that we have no ready means of estimating the actual quantity of cocaine passed into the skin. But, as a matter of probability and of experience in a good many cases, the quantity passed is really very small, though it is sufficient so to anæsthetise the skin as to render it capable of bearing without difficulty contact with a white-hot platinum wire heated by the electric current. Further than this no after-pain or sense of burning was experienced in the parts submitted to operation, though it is not certain that this is due to cocaine alone. I have noticed similar freedom from pain after applications of the galvano-cautère under chloroform. In every instance in which I have employed cocaine by cataphoresis, careful inquiry has been made as to the existence of after-toxic symptoms, always with a negative result.

In a preliminary note such as this it would be out of place to enter more fully into detail with regard not only to the method as applied to this particular drug, but as used in the practical and frequently successful treatment of skin lesions (ringworm &c.) by other drugs, and in the administration of mercury and iodide salts in the treatment of cutaneous, subcutaneous, and arthritic, syphilitic, glandular, or other affections. The plan is not new, for it was introduced as a physiological experiment some years ago in Germany; but, so far as I am aware, such previous attempts as have been made in this country to bring cataphoresis into practical use have been only partially successful, because—(1) the requisite conditions have been neglected; (2) the currents used have been too feeble, and applied for too short a time; (3) the operators seem to have been lacking in patience and often in knowledge of the instruments employed; (4) the reversals recommended in the text-books are not only useless, but worse than useless, for they tend to counteract any movement of fluid in a particular direction which may already have been set up by the current. Cataphoric medication is indicated in many cases hitherto laboriously treated by ointments, lotions, and subcutaneous injections, and it is not to be doubted that by its agency we are able to bring our remedies into direct apposition with the actual seats of disease, and thus to increase the possibilities of successful treatment of many lesions, not only in the direction of rapidity, but in that of pleasantness and of safety.

Suffolk-street, S.W.

[1] Medical Press and Circular.

AN ANALYSIS OF ONE HUNDRED CASES OF CATARACT EXTRACTION.

BY ERNEST F. NEVE, M.D., F.R.C.S. ED.,
SURGEON TO THE KASHMIR MISSION HOSPITAL.

THE following analysis may perhaps be of interest as an illustration of the general nature and results of 100 consecutive operations for cataract.[1]

1. *Selection of cases.*—Favourable and unfavourable cases are included. Several of the patients suffered from complications, which would usually be held to contraindicate operation. Our rule has been to operate on every patient whose vision was seriously affected, provided that perception of light was present. Two or three exceptions have occurred in which the eye was in such a condition from granular lids, trichiasis, or pannus, that a successful extraction would have given but little vision, while the risk of failure appeared disproportionately great. Cases of incipient cataract are told to return when they can no longer count fingers. In cases of partially mature cataract with imperfect vision, we have found that to put off a patient is often equivalent to losing his confidence. So we have been frequently compelled to operate on an immature lens. But in the case of a bilateral cataract where only one side is mature, that side is operated upon, and the use of cataract spectacles having been demonstrated to the patient, he is promised a pair when he returns for the second operation.

2. *Period.*—I have already published elsewhere[2] the general results of our cataract operations from 1882 to 1889. But of late years notes have been systematically taken of all cases. The present is an analysis of the work of two years and a half—viz., from May, 1887, till the end of December, 1889.

3. *Climatic and racial influences.*—I shall not discuss these, as they have been dealt with in an able paper by Surgeon-Major Freyer,[3] many of whose remarks, although they refer to another part of India, are almost equally applicable to Kashmir. I need only observe that the prevalence of ophthalmic disorders in the East and the ignorance and obstinacy of many patients in the way of deliberately removing their bandages and perpetrating all sorts of irregularities constitute a serious bar to the attainment of a high degree of success.

4. *Sex.*—Sixty-five operations were on males and thirty-five on females.

5. The *duration of stay in hospital* of each patient was on an average nineteen days. The longest period spent by any one patient was sixty days. These figures referred to *patients* not eyes, for in many patients both eyes were affected.

6. *Variety of cataract.*—Hard senile, 76; hard and soft (including Morgagnian), 14; traumatic, 4; diabetic, 3; soft, 2; black, 1.

In twenty-four patients in whom mature or nearly mature cataract existed on both sides first one lens was extracted, and then, after an interval of one or two weeks, the other side was operated upon. I believe that there is a very real risk of suppuration in operating upon an eye after it has been tied up for a week or more. Before operating on the second eye it should be exposed to the air for some days and treated with mild astringents; or probably the safest course in bilateral cataract, where it is desired to operate upon the second eye quickly, is at the first extraction only to bandage the eye which has been operated upon.

[1] Half the cases were operated upon by Mr. A. Neve.

[2] Eight Years' Surgical Work. Indian Medical Record, vol. i. 1890, p. 131.

[3] Observations on Cataract in India, THE LANCET, vol. i. 1879, p. 313.

7. *Previous condition of eye.*—(*a*) Disease: Eye irritable and watery, 7; slight granular lids, 6; conjunctivitis, 4; old iritis, with adhesions to lens' capsule, 1; blepharitis, 2; entropion, 2; minus tension, 5; atrophy of optic nerve, 2. In addition to these, there were two cases in which the disease was only recognised subsequently to extraction—viz., one case of partial retinal atrophy, and one of haziness of the vitreous. What was the result of the operation in these cases? Of the cases in which the eye was noted as irritable and watery, in four the result was good, while in three it was only fair. Granular lids, good 4, poor 2. Of the latter class, in one case there was some purulent infiltration of the cornea. Conjunctivitis, fair 2 (in one of these iritis occurred), not improved 1 (iritis and purulent infiltration of the cornea supervened), left hospital 1 (result unknown). In the case of old iritic adhesions, not improved, there were also thin blue-looking patches on the sclerotic, and the tension was minus. During the operation complications occurred, which I shall refer to later on. The results were good in both cases of blepharitis. Entropion, good 1, fair 1, but in the latter case there was some retinal atrophy. Diminished tension existed in two diabetic eyes and one traumatic cataract case, in all three of which the result was good. In two or three other cases there was doubt as to whether the tension were somewhat minus or not. (*b*) Appearance of lens: In twenty-eight cases there was no appearance of radiating striæ. The lens in most of these cases presented an amorphous milky aspect, but sometimes looked flocculent, or showed irregular dots and streaks. In two cases there were patches of localised thickening of the anterior capsule. In one case the lens was tremulous. In the last case the resulting vision was fair, while in one of the cases of thickened anterior capsule the vision although improved was poor, owing to the fact that there was haziness of the vitreous. (*c*) Previous vision: In ninety-eight eyes perception of light was present. The case of optic atrophy had no perception of light. He was told beforehand that the operation would be fruitless as far as vision was concerned. Six patients were able to count fingers placed close to the eye. Of these in four the resulting vision was good, in one slight iritis followed extraction and the vision was only fair, and one case was not improved, due to purulent infiltration of the cornea and iritis.

8. *Operative treatment.*—(*a*) Antiseptics: In unhealthy eyes appropriate lotions are used for a few days prior to operation. All instruments are placed in a 4 per cent. solution of carbolic acid, and subsequently in a saturated solution of boracic acid. The cocaine, atropine, and eserine drops are made with boracic lotion (recently 1 in 6000 perchloride of mercury lotion has been used in preference). The patient's face, eyelids, and conjunctival sacs are cleansed with perchloride of mercury lotion. The operator's hands are rendered aseptic. During the operation intermittent extraocular irrigation is carried on with boracic lotion, sal alembroth wool, and (recently) the double cyanide gauze are used as dressings. (*b*) Incision: Seventy-four eyes were operated upon by von Graefe's incision, twenty-five by a modified flap, and in one case only a small incision was made. We do not practise discission for soft cataract, as it is not suitable for Eastern countries, where the people are apt to be impatient, and leave hospital before vision has been restored. In four patients, immediately after the incision, the cornea fell in and became concave. In all these cases there was marked arcus senilis, which is, I believe, the cause of this tendency, owing to resulting diminution in elasticity of the walls of the eyeball, produced by the semi-calcareous zone around the cornea. This falling in of the cornea appears a bad omen. For of the four cases, three were unsatisfactory, one was not improved owing to iritis, in one the result was poor, and in one fair. In the two latter cases there was, however, in one case slight granular lids, and in the other irritable conjunctivitis. (*c*) Iridectomy: In two cases a preliminary iridectomy was performed. This is, I believe, a measure of great value if, for any reason, suppuration is apprehended. And I believe that here, where we so often have to deal with unhealthy eyes, more improvement in results may be anticipated from increased frequency in the performance of preliminary iridectomy than from any other precaution I know of. Unfortunately, there is always the risk of the patient running away before the second operation. In five eyes no iridectomy was performed. In two of these prolapse of the iris occurred. In one of the two, the other eye had been treated successfully without iridectomy, and the second eye presented no difficulty. Eserine was used after the operation, and the pupil was well contracted, but at the first dressing the iris was found to have prolapsed. The protruding portion was snipped off and the final result was very good. No doubt, in simple cases, extraction without iridectomy is the ideal operation. But I am convinced that a universal adoption of it will increase the percentage of failures. (*d*) Lens: In fifteen cases the nucleus was unusually large. In three cases it was flat, thin, and brittle. In two the nucleus was very small. In one case the lens consisted of laminated, flat, opaque scales. In four cases the cataract was of the Morgagnian variety. In eight instances the cortex was unusually sticky and gelatinous. (*e*) Intraocular irrigation: This was performed in twenty-five cases. It is a procedure of much value in the treatment of cases in which the cortex, whether from immaturity or some other reason, cannot be easily removed by ordinary methods. Our attention was first drawn to the subject by a paper of Dr. McKeown's.[4] The apparatus which we use is extremely simple—a glass funnel, indiarubber tubing, and the metal nozzle and glass tube of a suction curette. Boiled filtered water is used, and the requisite force of current can be obtained by elevating or depressing the funnel. The nozzle is inserted just sufficiently far to secure the formation of a current throughout the anterior chamber. The way in which sticky adherent cortex can be visibly washed out is most instructive. Of twenty-five cases the result in eighteen was very good, and these included two in which the lens was so far immature that the patient could count fingers before operation. In five cases the resulting vision was fair. In two of these large nuclei had to be removed with the hook, and there was some subsequent iritis. In one case iritis occurred after the twelfth day; and in one (also very immature) there was slight iritis during the first week. In two cases the resulting vision was poor. In one of these, a black cataract, the lens did not present, and had to be removed with the scoop. There was no show of vitreous. The other was a case in which, after the completion of the operation and removal of the speculum, the patient strained violently, and a loss of vitreous occurred. As these twenty-five included the most difficult cases of all, the results may be regarded as very favourable to irrigation. (*f*) Accidents and complications: Prolapse of iris occurred in two cases subsequently to operation. In one of these the iris became incarcerated, but the vision remained excellent. In four cases severe bleeding took place into the anterior chamber. Loss of vitreous occurred in two cases; in one of these it followed the removal of the lens (tremulous) with the scoop. In five instances a bead of vitreous appeared. In one case—an eye of minus tension—dislocation of the lens took place during the incision, and after the iridectomy the anterior chamber filled with blood. The lens could not be seen or felt. The eye healed up without bad symptoms, but the operation was, of course, a failure. In four cases the scoop was required. In three instances, in which the lens was removed with the hook, there was no loss of vitreous. In one case the corneal wound healed very slowly. (*g*) Inflammatory sequels: In three eyes purulent infiltration of the cornea and iritis occurred. In thirteen cases iritis appeared—in one case severe, chronic in two, and slight in ten.

9. *General results.* — Stated according to conventional methods the results were: successful, 93; failures, 5; left hospital, 2. One of these last ought probably to be added to the failures. Of the ninety-three successful cases, in seventy-one the vision was very good, in fifteen fair, and in six poor. By fair vision I mean finger counting at less than 12 ft., and by poor vision finger counting at less than 6 ft. The sight was usually tested a fortnight or three weeks subsequently to operation, immediately after the final removal of the bandages. It is an important question with regard to cataract extraction as to how far a surgeon is justified in refusing to operate from the fear of partial or complete failure. No doubt, by a careful selection of cases, the operator's reputation is enhanced. But it cannot be ethically correct to condemn a patient to irremediable blindness when there is a reasonable chance of improving (even if not restoring) his sight by operation. It is hoped that as a contribution to this subject the present analysis may not be without interest.

Kashmir.

[4] Brit. Med. Jour., vol. ii. 1884, p. 238.

CATARACT EXTRACTION WITHOUT IRIDECTOMY,

THE CORTICAL MATTER BEING REMOVED BY INJECTION WITH A SPECIALLY CONSTRUCTED SYRINGE.[1]

BY W. J. CANT, L.R.C.P. LOND. &c.,
HONORARY SURGEON TO THE LINCOLN COUNTY HOSPITAL.

FOR a period of over two years I have adopted the plan carried out by Dr. McKeown of injecting water for the removal of cortical matter in cataract extraction, but recently with two modifications: — (1) By using what, in my opinion, is a more convenient syringe; (2) by not performing iridectomy. The nozzle of the syringe I use is much smaller in every way; it has no projecting lip, and can be introduced and manipulated in the eye without causing any discomfort to the patient. The body of the syringe is short, so

that the hand of the operator comes close to his work; and although it holds only about twenty drops, this is quite sufficient for ordinary purposes, but if necessary it can be refilled. Messrs. W. Wood and Co. of York are the makers of the syringe.

In the forty cases in which I have performed this operation there has been the greatest success. In none of the cases has there been any tendency to loss of vitreous, no iritis of any moment, and certainly less than in those where iridectomy was performed. This is due, I think, to the absence of any blood in the anterior chamber, and to the iris not being injured. In a few cases the base of the iris has formed a slight adhesion to the wound, but the pupil has remained circular and active. I have never found any trouble caused by this; it is of no more consequence, and occurs no oftener, than the slight adhesions that are sometimes seen when iridectomy has been performed. There were two cases of prolapse—one caused, I believe, by using eserine, which stretches the iris, so that the aqueous, not having means of free escape, forces it out into the woun[1]; the other occurred in a very restless patient. On both these cases iridectomy was done the day after under chloroform without any difficulty, as the wound is kept open by the prolapsed iris, and the result was the same as in the iridectomy cases. No inflammation followed, and the vision was good. The operation is carried out in the following manner, and I performed it on June 12th before the members of the Midland Branch of the British Medical Association:—A solution of homatropine and cocaine is dropped into the eye twice before the operation, so as to have the pupil fully dilated. It is then made anæsthetic with cocaine, and all the parts, together with the instruments, made antiseptic with a perchloride of mercury solution (1 in 5000), the patient being operated upon in his own bed. The eyeball is fixed with the forceps, and the eyelid raised by an assistant, or by the ring finger of the operator, and the ordinary linear extraction incision made with a Taylor's knife, which, having a broad base, prevents the iris falling over the edge. After the section of the cornea has been made, the operator takes charge of the upper lid, introduces the cystotome, and freely opens the capsule. The lens is then gently pressed out with as much cortical matter as possible. During this, the iris prolapses well out of the wound, and the eye is then in the same condition as when iridectomy has been performed. The nozzle of the syringe is introduced, and warm water syringed into the lens cavity. Any cortical matter readily comes away, the edges of the wound are thoroughly cleaned, the iris falls at once into its place with the help of the nozzle of the syringe used as a spatula. The iris then becomes contracted. A little perchloride solution is allowed to run over the eyeball, the lids closed and smeared with vaseline and atropine ointment, a hot wet pad of sal alembroth wool applied, and then gutta-percha tissue, dry wool, and a bandage. The patient is kept perfectly quiet for twenty-four hours, the eye dressed daily in a similar manner for four days, then a dry pad only.

I have performed this operation in cases where the lens was immature, where there was a large amount of white cortical matter, and in traumatic cataracts, seldom making any selection. In traumatic cataracts it is especially useful, as the lens matter can be removed before inflammation occurs to fix the iris and increase the difficulties. In cases of steel in the lens, I have removed the steel with a magnet, and then the whole lens at once, with the best possible results. It is not necessary to do secondary operations so often, as, there being no iritis, there is no thick membrane formed. The vision, if anything, is better than when iridectomy has been done, as I have proved in patients who had been iridectomised in one and not the other eye; and there are the other advantages of having a circular, active, and natural pupil.

Lincoln.

[1] A paper read at the Ophthalmological Section of the British Medical Association held in Birmingham, Aug. 31st, 1890.

INFLUENZA.

BY CHARLES EGERTON FITZGERALD, M.D.

NOT long since THE LANCET published a short note of mine on "Influenza," in which I expressed the opinion that the so-called influenza was not a disease *per se*, but a profound modification by some unknown "influence" of any ordinary disease which might be present. Since I thus wrote I have had ample opportunity of witnessing and experiencing personally the course and symptoms of this disease, and am more than ever convinced of the truth of the view I then advocated. During the prevalence of the influenza wave I believe the atmosphere to be teeming with some pathogenic "influence," possibly (as it is the fashion nowadays to ascribe everything to microbic agency) to some germ or spore. Or there may possibly exist at such times some electrical state of the atmosphere, which may exercise an unknown but powerful influence on the nervous system. However it may originate, the whole atmosphere seems then to be laden or charged with some subtle poison which profoundly modifies any existent illness. To my mind the whole history of the influenza epidemic points to the truth of this theory. I would ask, What are the symptoms of influenza? They are so numerous and so protean that it is simply impossible to ascribe them all to any one disease. Every organ in the body is in turn affected—the brain, the spinal cord, in fact the entire nervous system. In other cases it is the heart and circulation, the respiratory tract, the bowels and digestive organs, the muscles or the joints which are affected. There is no uniformity about the symptoms; in scarcely two cases are they alike. Take, for example, the temperature; it is sometimes high, sometimes subnormal, sometimes normal. Nor is there less variation in the pulse; it may be rapid, slow, strong, or weak; arterial tension may be increased or diminished. Catarrh may be absent or present, there may be diarrhœa or constipation, prostration or excitement. Perhaps the most general symptom is a passive inflammation of the base of one or both lungs, which generally (not always) clears away rapidly. Again, look at the sequelæ ascribed to influenza, they are at once so diverse and so multitudinous that it seems folly to consider them all as the result of any one complaint. It is scarcely possible to take up a number of THE LANCET without meeting with some new sequela of this protean disease. Paralysis, meningitis, neuralgia, herpes, heart failure, valvular disease, muscular weakness, rheumatism, arthritis, dropsy, alopecia areata, eczema, jaundice, diabetes, albuminuria, dysentery, abortion, these and a host of other maladies, due to disturbance of every individual organ in the body, all are put down to one single cause. It seems to me in the highest degree unphilosophical and absurd to credit any single disease with so varied a train of symptoms and sequelæ. A far more rational solution of

the difficulty is found if we imagine the whole system, especially the nervous system, to be deeply impressed and lowered by some powerful external agency, which renders it not only prone to succumb to any illness, but aggravates and deepens the ordinary symptoms of any disease the patient may contract. I cannot help fancying some vague idea of this truth must have originated the Italian name *influenza*—i.e., an "influence," exercised by some unknown cause on all illness occurring at certain seasons or under certain atmospheric conditions. The frequency with which attacks, which at any other time would have been only ordinary catarrh, bronchitis, or indigestion, assumed a grave character and an adynamic type, was especially remarkable during this epidemic. So general, indeed, was pneumonia (mostly double) as a symptom, that I was at one time disposed to regard it as *the* epidemic. I am quite sure I saw more cases of double pneumonia during the three months when influenza prevailed than I had treated in the previous twenty years. All these facts, I submit, point rather to some powerfully depressing atmospheric or aerial agency than to any ordinary infection or contagium.

What this "influence" is I am unprepared to say, but I am convinced we are more likely to arrive at a philosophical and practical comprehension of this mysterious epidemic by studying and working on the lines I have here imperfectly indicated than by regarding influenza as a separate entity.

Folkestone.

ECTOPIC OVARIAN GESTATION.

BY H. A. REEVES, F.R.C.S.ED., M.R.C.S.,
SURGEON TO THE HOSPITAL FOR WOMEN ETC.

FOR the notes of this uncommon and interesting case I am indebted to Mr. C. E. May, house surgeon to the hospital.

C. M——, aged thirty-seven, married seventeen years, has had four children and one miscarriage; last pregnancy twelve years ago. Catamenia began at fifteen, always regular. She was admitted by Dr. J. Oliver complaining of pain from a pyriform tumour situated centrally, which was smooth, tense, elastic, but not fluctuating, and very prominent anteriorly. The growth was movable laterally, painless, and dull. Vaginal examination revealed that the cervix did not move with the tumour, but that it was soft. No fœtal, placental, or uterine sounds or ballottement. She stated that she thought herself pregnant, and miscarried in May, 1889. At this time she flooded and passed clots, and was in constant pain, and after this was in St. Bartholomew's Hospital under the late Dr. M. Duncan for ovarian inflammation. Before this supposed miscarriage she missed two periods. From May till December the menses disappeared, and as her abdomen was getting gradually larger, she thought herself pregnant and engaged a medical man to attend her. On Dec. 1st last year she began to lose blood and the flow continued for eight weeks, but the loss was not very profuse. She again lost blood for a week, just before the operation, near the end of April of this year. Her abdomen was larger at Christmas than it was in April, 1890, but has again increased in size during the past three or four months. She says she felt fœtal movements in October and November, and that the swelling caused her pains which were like labour pains. In November she had a sudden attack of abdominal pain, lasting fifteen minutes, and nearly fainted, but has had none since. No sound was passed till after the menstruation which preceded the operation, when it was found that the uterus was enlarged, as the sound passed three inches and to the left. A whitish watery secretion could be expressed from the breasts, which were not enlarged. Montgomery's glands seemed prominent. At a consultation three probabilities were discussed — viz., ovarian with pregnancy, fibroid with same condition, and extra-uterine gestation, and it was decided to explore and act according to conditions.

On opening the abdomen a large tumour, having the aspect of uterine tissue with patches of inflammation, and which by its feel might have been a fibro-cyst or even a pregnant uterus, was exposed. On introducing the hand the enlarged womb, which was not bicornuate, was found at the lower and right portion of the tumour. A medium-sized trocar was introduced into the growth, and about three ounces of yellowish, thick, and foul-odoured fluid withdrawn. The end of the instrument struck against a hardish body, and as no more fluid escaped the trocar opening was slightly enlarged and the finger introduced. The shoulder and head of a fœtus were then felt, and the wound in the sac was enlarged by carefully tearing it with the two index fingers, and the dead child extracted. The cord was then clamped and divided. The macerated placenta, which was of yellow aspect, was peeled off the inside of the sac without bleeding. The broad ligament was then tied in a double ligature close to the uterus, and the thickened remains of the fœtal membranes peeled away. The placenta was inside the fœtal membranes, which were enclosed between the layers of the left broad ligament, and the normal-looking Fallopian tube was stretched across the upper and anterior aspect of the tumour. No trace of the left ovary could be seen or felt, and in peeling off the membranes, which were firmly adherent in places, a portion of the posterior layer of the broad ligament corresponding to the usual position of the ovary was removed with them. The right ovary was cirrhotic, and was left. The pedicle was treated intra-abdominally, and a glass drainage-tube was passed through the rent in the posterior layer of the broad ligament, so as to drain the cavity occupied by the tumour between its layers after the rent edges were attached to the parietal peritoneum. The tube was removed early on the third day, as nothing came through it after thirty-six hours. Her temperature never exceeded 99° or the pulse 100, and she was in the general ward on the sixth day.

I think there can be no doubt that this was a genuine case of true ovarian pregnancy—not tubo-ovarian,—and that the growth first separated the layers of the mesovarium and expanded between the layers of the broad ligament. The normal-looking Fallopian tube was stretched over the tumour, and not the slightest trace of ovarian tissue could be seen or felt, being probably encroached on and absorbed by pressure during the development of the fœtus, which looked like a full term one, and was a female. The uterus was not bicornuate even in a rudimentary sense, and the reddish aspect of the tumour was most likely due to the hypertrophied unstriped muscle fibres between the layers of the broad ligament. The fœtus and other parts removed have been kept, and are open to inspection by anyone interested. According to the patient's history she became pregnant in March, 1889, and two months after the real or supposed miscarriage occurred. May it not be that she was carrying twins, one in the womb and the other in the ovary, and that she aborted the former? or was, as may be more likely, the uterine hæmorrhage decidual only, and in connexion with the ectopic pregnancy? She felt quickening movements at the seventh and eighth months, and at these dates had spurious labour pains. In November—i.e., at end of the eighth month—the sudden attack of severe pain was probably due to the death of the child, but it must not be forgotten that these pains may have been caused by the contraction of the walls of the sac or by those of the womb. At the ninth month she had flooding, which lasted, though not profusely, for two months, and again seven weeks after she menstruated (?) for a week. Was the bleeding at the ninth month decidual, or was it merely from an enlarged and congested womb? I think it must have been the former. Her abdomen, which was large in December (ninth month), decreased in size, doubtless because of the absorption of liquor amnii; but it is not easy to account for her statement that it again increased in size, unless one supposes that the tumour, from being more or less lateral, became central and projected more, or that the attacks of inflammation of which the serous sac wall gave evidence caused intestinal distension, thus misleading her. There were anterior parietal adhesions, and the posterior layer of the broad ligament was adherent to the sigmoid flexure.

Grosvenor-street, W.

ACCOMMODATION FOR THE INSANE POOR.—In connexion with a letter from the Commissioners in Lunacy, the Asylums Committee of the County Council in their report recommend: "That they be authorised to take such preliminary steps as they think best for promptly providing further asylum accommodation for 2000 lunatics, provided that no engagement or liability be entered into without the sanction of the Council." Mr. Boulnois, M.P., hoped the matter would be postponed for consideration for six months in order that they might obtain fuller information. Some discussion followed, and the recommendation of the committee was agreed to.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

EAST LONDON HOSPITAL FOR CHILDREN.

A CASE OF RHEUMATIC PERIOSTEAL NODE; REMARKS.

(Under the care of Dr. COUTTS.)

IN the cases of which this is an example, the affection of the periosteum appears to have no relationship to the inflammation of the joint—it has not spread from it. The examples previously recorded have usually been situated on the ulna in children, and in Dr. Angel Money's patient,[1] where an examination was made after death, he found "nodular exostoses" growing from the olecranon. We refer our readers to the account of the discussion on Dr. Coutts' paper read at the Clinical Society,[2] and to his remarks on this case. The rarity of periosteal nodes as one of the acute signs of rheumatism, the paucity of our knowledge and literature concerning them, and the scepticism once expressed as to their possible occurrence, all seem to indicate that at present every case descriptive of the condition should be put on record. For the notes of this case we are indebted to Mr. Ludford Cooper, house physician.

C. S——, aged ten years, presented herself at the hospital on July 15th, 1890, and was admitted into the Enfield ward suffering from chorea and rheumatism. The patient nine months previously was laid up with joint pains for three weeks; five years since she is said to have had "typhus." The family history was as follows: Father healthy; no rheumatism. Mother had rheumatic fever at thirty-three. No other history of rheumatism, neuroses, or phthisis in any members of the family. The patient's present illness commenced two months before admission with irregular movements of the joints. A few days before the movements were noticed the patient complained of pains in the joints of the left arm, and these, together with the right wrist and both knees, became swollen. She sweated very much, and complained a great deal of sore-throat. The purposeless movements became so bad that the patient was unable to drink from a cup, and application was soon after made at the hospital.

State on admission.—The patient is a well-nourished child. There are slight purposeless movements present about the head and limbs, but not to any marked degree. No joints swollen; no clubbing of the fingers. Temperature 100·4°. Heart's apex beat in the fourth intercostal space, just inside nipple. No absolute cardiac dulness; first sound at apex blurred and prolonged, rumbling in character at times. Over the tenth dorsal vertebra is a well-marked movable nodule the size of a threepenny piece. Other nodules of smaller sizes than the last are situated over the points of both elbows, the occipital protuberance, the external tuberosity of the left tibia, and near the spine of the left scapula. About an inch below the olecranon, on the subcutaneous surface of the right ulna, is a hard immovable node, evidently subperiosteal. This is about as large as half a medium-sized walnut, with its long diameter in the axis of that of the limb. Over this node is a small nodule, freely movable, and quite distinct from the bony swelling beneath it. No other nodules elsewhere.

July 18th.—There is now on palpation to be detected a very fine but well-marked presystolic thrill. On auscultation a presystolic murmur, small but distinct, is to be heard. Nodules decreasing in size; chorea improving.

29th.—Faint but well-marked systolic murmur at the apex, also presystolic at times; no thrill; both node and nodules much diminished.

Aug. 18th.—The patient, who has been up and about the ward, still shows fairly well-marked choreic movements; in fact, they have been intensified by her getting up. Nodules practically disappeared; node almost gone.

26th.—Patient discharged. Nodules have entirely disappeared; distinct thickening left over the situation of the node.

Sept. 25th.—The patient seen to-day after return from the country. Faint double murmur at cardiac apex; still thickening over the situation of the node.

Remarks by Dr. COUTTS.—In November last Dr. A. E. Garrod and myself brought notes of three cases of this affection before the notice of the Clinical Society. To those who followed the description of these three cases no doubt can arise of this last being one of a precisely similar nature. All four were the subjects of subcutaneous nodules and heart disease, and the situation of the periosteal bony swelling was in each the subcutaneous surface of the ulna immediately below the olecranon process. This last, like the second of my two former cases, suffered from chorea. In all there was a negative history of syphilis, congenital and acquired, and an absence of any trace of that complaint. There was also no reason to suspect a traumatic origin for the periostitis. In conjunction with these negative facts, the contemporaneous history of subcutaneous nodules and other acute manifestations of rheumatism with that of the periosteal swellings left no room for doubt of the rheumatic origin of the latter. That periosteal nodes as manifestations of rheumatism are somewhat of a rarity is proved by the fact that, except two cases mentioned by Drs. Barlow and Angel Money, those of Dr. Garrod and my own are the only indisputable ones on record. My former two cases occurred seven years ago, and, although on the look-out for others, my seach has been in vain until the present year, notwithstanding that cases of rheumatism of all degrees of severity, with and without subcutaneous nodules, have been plentiful enough and to spare. It may be perfectly true, as some physicians assert, that periostitis is not a very uncommon accompaniment of rheumatism. But, as far as I can gather, in the cases they refer to the diagnosis has been merely inferential from the general symptoms, the periostitis not having been of sufficient severity to lead to definite bony swelling, or else has been in such a situation that such possible swelling has not lent itself to direct observation. In connexion with such cases there is an interesting article by Mr. McNamara in the second volume of the Westminster Hospital Reports. Just as in the last cases of rheumatism referred to, the signs of periostitis are insufficient, so, in the periosteal nodes that are stated to be so common in surgical out-patient rooms, I consider the evidence of rheumatism in their causation eminently unsatisfactory. In the absence of syphilis and traumatism, or other recognised causes to account for them, I fear the diagnosis of rheumatism is too often made on the presence of pain in other parts, either in the present or the past. Such proofs of their rheumatic origin as are put forward would, I fancy, fail to convince most physicians of their nature. It does not follow, moreover, that every node occurring in a rheumatic subject is necessarily rheumatic in origin. The clinical history, too, of these surgical rheumatic nodes must be very different from that of the temporary ones accompanying the acuter signs of rheumatism such as I have brought forward. These last could only by the rarest chance find themselves on the surgical side of any hospital.

[1] THE LANCET, vol. ii. 1890, p. 265.
[2] Ibid., vol. ii. 1890, p. 1118.

GENERAL HOSPITAL, BIRMINGHAM.

SOME CASES ILLUSTRATIVE OF RENAL SURGERY; REMARKS.

(Under the care of Mr. GILBERT BARLING.)

WE published in our last week's issue (p. 819) notes of Cases 1 and 2 of this series. The former was an example of large pyonephrosis on the left side, latent renal calculus on the right side, death from uræmia; the latter one of uric-acid renal calculus successfully removed by the operation of nephrolithotomy. Cases 3 and 4, which we now publish, present many points of interest to surgeons, the most important of which is the severe pain suffered by the patients, and relieved by the operation, although no calculus was removed or even detected on close search. Dr. Tiffany[1] of Baltimore has suggested, and carried out with success, the operation of splitting the renal capsule, with the idea of relieving tension in a kidney the seat of severe and recurring nephralgia of long standing. In these cases, although no calculus was

[1] Sajous, vol. iii., E. 31, 1890.

found, there was renal disease, and Mr. Barling's operations were exploratory.

CASE 3. *Symptoms of renal calculus; exploration of kidney; no stone found; death from malignant disease.*—In the *Birmingham Medical Review*, vol. xxiv., Mr. Barling recorded a case in which exploration of the kidney failed to find a calculus, although the evidence pointed strongly to the presence of one. Briefly, the symptoms were these: for more than a year pain in the left loin and occasional attacks of colic, commencing in the back and passing down the course of the ureter to the thigh and scrotum; the colic was accompanied by shivering and vomiting. There was also pain in the right loin at times, in the thighs, and at the base of the sacrum. In one attack of colic the patient passed a uric-acid calculus weighing twelve grains, but without relief to the symptoms, so six months afterwards the left kidney was explored, the pelvis being incised and searched with a sound. No stone was detected, nor any marked change in the kidney itself. A year after this the patient still continued to suffer attacks of colic, was practically bedridden, and was much thinner. He was seen for the last time fifteen months after the exploration. He was then greatly wasted and suffering from cough and dyspnœa; the liver was greatly enlarged and presented irregular prominences; the right lung was consolidated in patches, and there was some pleurisy. Death took place shortly afterwards, but no post-mortem examination was allowed. There can be no doubt that the patient died of malignant growth in the lung and liver; but whether a primary growth was the cause of his kidney symptoms, or whether there was the coincidence of growth and calculus, the unfortunate absence of a post-mortem examination leaves in doubt.

CASE 4. *Pyelitis; suspected renal calculus; exploration failing to find stone; complete relief from pain.*—L. D——, aged twenty-five, was admitted into the General Hospital under the care of Mr. Barling, on Aug. 17th, 1887. He was a spare delicate-looking man with a good family history, except that one brother had died of phthisis. His renal symptoms commenced five years before admission with pain in the left lumbar region and groin, blood being then noticed in the urine for some days, but never since. The pain in the loin, however, continued and increased in severity, and was accompanied by frequent micturition, every two hours or oftener, whilst scalding and shivering on passing urine were occasionally present. Particles of grit were sometimes passed, but vomiting never occurred. Palpation failed to detect any enlargement of the kidney, but there was general tenderness in the loin and complaint of constant pain. The urine, about fifty ounces daily, sp. gr. from 1013 to 1021, acid in reaction, always contained pus and sometimes blood in microscopic quantities, and crystals of oxalate of lime and stellar phosphates. The bladder was sounded for stone, with negative result. Although the symptoms were not typically those of renal calculus, in the presence of severe pain they appeared to justify exploration, which was done through the lumbar incision. The kidney was palpated carefully with the finger on both anterior and posterior surfaces, and subsequently was punctured in numerous places on the posterior surface with a needle, but without finding a stone. The examination of the kidney induced constant retching, lividity, and collapse; so much so that it was necessary to close the wound without opening the pelvis of the kidney to explore with a probe, as had been intended. A good recovery followed, interrupted only by a mild pleurisy on the *right* side, and the patient left the hospital at the end of five weeks free from pain. Mr. Barling has examined him occasionally since, and finds that in all respects he is in much the same condition as when he was admitted to the hospital. He micturates too often and with occasional stinging pain at the end of the penis; the urine contains pus and occasionally a trace of blood, and bits of grit are sometimes passed. In one respect he is, however, greatly improved—viz., in his freedom from pain, which, before operation, incapacitated him for work, whereas now he is able to follow his occupation regularly, and a year ago he married.

Remarks by Mr. BARLING.—The preceding cases illustrate well the difficulty of making complete diagnosis in many of the affections of the kidney which the surgeon is called on to deal with. Case 2 may be termed a classical case of renal calculus, but such are, in my experience, uncommon, and many cases call for exploration in which the symptoms of calculus are atypical. In a considerable number of these no stone is found, but the occasional discovery of a stone, the relief from pain at times when no stone is detected (as in Case 4), and the very moderate risk of exploration justify a resort to this procedure. To refer to another side of the question, in Case 3 the symptoms were fairly characteristic. In one attack of colic a calculus was passed, and yet none was found at the operation. The death of the patient in less than eighteen months from the operation, with undoubted malignant disease, suggests reasonably that the symptoms persisting after the passage of a calculus were due to growth involving the kidney or its nerve plexus. Possibly growth and calculus coexisted, as in a case recently under the care of my colleague, Mr. Chavasse. The difficulty of thoroughly exploring the kidney in this case was very great. A fat and muscular man, a limited space, and a kidney well tucked under the ribs on the left side. Under these conditions, the thorough examination of a kidney for stone, by opening the pelvis and sounding the calyces, is a proceeding that taxes one's skill and patience to the utmost, whilst under favourable conditions the same manipulation may be carried out with the greatest ease. The huge pyo-nephrosis in Case 1 in all probability had as its starting point some calculous matter, which, after setting up a suppurative process, escaped by the ureter. I was constantly on the watch for a favourable opportunity to excise this kidney, but the increasing quantity of urine, the diminishing urea, and then the evident affection of the other kidney, happily withheld me from an operation that could only have ended in disaster, looking to the condition of the right kidney at the necropsy.

THE VICTORIA JUBILEE DISPENSARY, DEESA, INDIA.

TWO CASES OF SUPRA-PUBIC LITHOTOMY; REMARKS.

(Under the care of Surgeon GEORGE S. THOMSON, I.M.S., 20th Bombay Infantry, Civil Surgeon, Deesa.)

THESE are successful cases of removal of calculus by the supra-pubic operation in which the duration of the after-treatment was unusually short, being in the first eight days and in the second ten days. It is not often that we read of cases which have presented such a rapid healing of the wound where no sutures have been used. Opinions differ still as to the advisability of closing the wound by means of sutures, the excellent results obtained in some cases being counterbalanced by unfortunate results in others apparently as favourable. We have already[1] given some of the arguments for and against this method of treating the wound, and do not purpose to enter upon a consideration of the question now. Since our reference to the subject, Dr. F. S. Watson[2] has given his result of 100 reputed cases of primary vesical suture after supra-pubic cystotomy. He says that 35 per cent. healed by first intention, and that whatever harm is recorded as having arisen from the suture was invariably due to not having left the abdominal wound open.

CASE 1.—A villager, A. C——, aged thirty-two, a Rajpoot cultivator, came to the Victoria Jubilee Dispensary on May 10th with symptoms of stone, and was admitted. He had been suffering from great pain, frequent micturition, and irritability of the bladder for two years and a half. On passing a Thompson's sound a stone was at once detected, and judged to be of large size, probably larger than could easily be removed by lateral lithotomy. The patient was ordered a purgative draught and vesical sedatives (hyoscyamus, belladonna, bromide of potassium, and camphor) were administered. In the evening it was decided to perform supra-pubic lithotomy. Chloroform was administered, and a No. 8 silver catheter introduced, through which a stream of antiseptic fluid was run for some time, to thoroughly wash out the bladder. The bladder was then distended by an improvised apparatus comprising a reservoir or "irrigator" for holding the distending fluid. This consisted of an empty preserved fruit tin, to which a stopcock had been fixed by the regimental armourer. A piece of quarter-inch indiarubber tubing was tied over the end of the stopcock, the other extremity of the tubing being tied to the catheter to conduct a solution of boracic acid

[1] THE LANCET (Mirror of Hospital Practice), vol. ii. 1888, p. 1174.
[2] Boston Med. and Surg. Jour., vol. i., 1889, April; see also Sajous, vol. iii., E. 28, 1890.

(one drachm of boracic acid to one pint of warm water) from the "irrigator" to the bladder. No tubing or ligature was tied round the penis, and no mode of rectal distension was made use of. By raising the irrigating reservoir or lowering it the distension of the bladder was easily regulated, and was completely under control When the patient was well under the anæsthetic the bladder was seen and felt to bulge the supra-pubic region on raising the irrigating apparatus. The pubes having been shaved and washed antiseptically, an incision three inches long was made in the middle line, readily exposing the bladder. No vessels required ligaturing till that organ was reached. The bladder now bulged up in the wound, and was readily distinguishable by its pink colour and the sense of resistance it offered to the forefinger of the left hand introduced into the wound. The catheter afforded a safe guide for the incision into the proper viscus, thus obviating the operator's risk of making a mistake. With the left forefinger in the wound, "feeling the catheter," the knife was introduced and an incision made upon the end of the catheter at a spot free from veins above the pubes. The finger was now introduced into the bladder along the knife and the latter withdrawn, when a gush of fluid washed the calculus up to the exploring finger. By the aid of a lithotomy forceps the stone was readily seized and removed. The bladder was then explored and thoroughly irrigated with the boracic acid solution. No bladder sutures were inserted. The catheter was removed, all bleeding points looked for and twisted. There was very little hæmorrhage, and no vessels required ligation. The wound was now carefully dried and a drainage-tube inserted at its lower angle, reaching down to but not *into* the bladder. Two carbolised catgut sutures were placed in the upper two-thirds of the wound, and iodoform freely dusted over it. A dry dressing of boracic lint covered with lint pads, wetted with a 1 in 5000 solution of corrosive sublimate, was applied, the whole protected with cotton-wool and kept in position with a many-tailed bandage. The calculus when weighed in a dry state was 386 grains, and measured one inch and a half in its longest diameter. It consisted of oxalates of lime covered with phosphates. A catheter of soft indiarubber was tied in the bladder. The patient was ordered an opiate every four hours, and sixteen hours after the operation the wound was dressed. No urine could be detected on the dressings, and the wound seemed healing. The catheter was retained for twenty-four hours longer after the first dressing, and then it was used to draw off the urine four times daily. The patient's temperature never rose above 100·6°. He was free from pain, slept well, and had no tenderness even on deep pressure over the supra-pubic region. At no time did urine appear through the wound, and on the ninth day after the operation the man went home perfectly well and free from all bladder symptoms.

CASE 2.—A Gugerati boy, K. M——, aged six years, was operated on for a stone in the bladder by the supra-pubic method on June 3rd, 1890. Owing to great tenderness of the urethra, it was impossible to keep an indiarubber catheter tied in the bladder, and a few drops of urine came through the incision for a few days. The urine was drawn off with a soft catheter six times in the twenty-four hours, and the wound healed completely in ten days. The same procedure was adopted in this case in all other respects as in the above detailed case. No rectal bag was used, no sutures inserted in the bladder, and no difficulty was experienced in finding and extracting the stone, which when dried was found to weigh 88 grains, and was composed of oxalate of lime.

Remarks by Mr. GEO. S. THOMSON.—These two cases make up a series of ten successfully completed operations by this method, with a complete absence of any untoward symptoms. The use of sutures in the bladder has not been found necessary, nor from experience are they proved advisable. In these cases their insertion would have been very difficult and tedious. The operation is easy, and is free from shock, hæmorrhage, perineal fistula, and risks of wound to the rectum, and the other disadvantages of perineal lithotomy. It affords the readiest means for exploring the bladder and of removing any cause of disease that may be met with in that viscus capable of being removed.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—Colonel Lyon-Campbell, R.E., has been elected house governor of the hospital.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Presidential Remarks — Acromegaly — Chylous Ascites — Neoplasms in Lung and Liver—Incarcerated Hernia with Ulcerated Gut—Sarcoma of Liver—Loose Bodies from Knee-joint.

AN ordinary meeting of this Society was held on Oct. 21st, the President, Dr. W. H. Dickinson, being in the chair.

The PRESIDENT, on occupying the chair for the first time during the present session, took occasion to refer to the increasing prosperity of the Society. The numbers had increased in spite of the loss of eleven members by death, to one of whom, Dr. Matthews Duncan, he referred in a few well-chosen and sympathetic words. The forthcoming volume of the Transactions had been improved by the employment of better paper, and by the introduction of a larger number of coloured pictures. Referring to the wish he had expressed on his assumption of the presidency, that the Society should become more than one of morbid anatomy, he reminded the members that one of the laws had been altered so as to include chemical and other observations as to the nature and results of disease within the scope of their ordinary work; in fact, now scarcely anything but treatment was excluded, and methods of treatment were probably more improved by working at the intimate nature of disease than by recording the results of empiricism. He thought that it would add much to the interest and pleasure of the meetings if members would deliver their communications orally as far as possible.

Dr. ROLLESTON showed for Dr. Kanthack a living specimen of Acromegaly. The subject was an enormous man, thirty-nine years of age, with a history that he had always been exceptionally strong. His present measurements were: Height, 73½ in.; head, 26½ in. in circumference, 9½ in. in length, 6⅞ in. in breadth. The hands and feet had always been enormous, as shown by circumference of the thumb—4 in. The thyroid body was very small. There was no evidence of a persistent or enlarged thymus. Dr. Rolleston than gave a definition of the disease, acromegaly, with the differential diagnosis from myxœdema, osteitis deformans, leontiasis ossium, and from general giant growth. The urine, recently tested, contained a large amount of sugar.

Dr. SIDNEY MARTIN gave the details of a case of Chylous Ascites and Chylous Hydrothorax. The patient, a cook aged thirty-nine, was admitted into the Middlesex Hospital, under Dr. Cayley, suffering from enlargement of the abdomen, due to ascites. He gave a history of five months' illness, coming on after exposure to cold, and commencing with cough, expectoration, and dyspnœa. Vomiting ensued, with loss of appetite, and the abdomen was noticed as getting larger. On admission there were signs of ascites. There was deficient movement of the right side of the chest, with râles and rhonchi. The movements and breath sounds of the left side were exaggerated. During the patient's stay in the hospital the ascites increased, swelling of the feet supervened, and clear fluid was drawn off by puncture. The left arm became œdematous. There was dyspnœa and a slight attack of diarrhœa. The first tapping (six days before death) withdrew forty-eight ounces of chylous fluid, the second tapping sixteen ounces. The patient died in dyspnœa. At the post-mortem, the abdomen contained 180 ounces of yellowish, milky (chylous) fluid, containing over 1 per cent. of fat in the form of an emulsion and flocculi of fibrin, white from the admixture of fat. There was no peritonitis. The lymphatics over the surface of the small gut (also to a less extent of the large gut) in the mesentery, beneath the pleura and in the lungs were distended with an opaque, milky fluid. There were ten ounces of chylous fluid in the left pleura; the right was adherent. The opening of the thoracic duct into the veins was obstructed by a closure of the subclavian and jugular veins about two inches from their ending, the veins for that distance being impervious, fibrous cords. The origin of the left innominate vein was reduced to a chink and closed by a piece of tough fibrin. The thoracic duct and receptaculum chyli could not be found. The heart, liver, spleen, and kidneys were normal. The case was compared with the

other cases of chylous ascites which had been recorded.—The PRESIDENT supposed that there was no question of the cause being filaria. He hoped that notes of other similar cases would be recorded with it. In the old days it was thought that the chylous fluid transuded directly from the blood.—Dr. WILBERFORCE SMITH referred to a case in the London Hospital of a woman aged sixty-seven, who had carcinoma of the peritoneum. Seventy or eighty ounces of chylous fluid were drawn off every three weeks.—Mr. ROGER WILLIAMS alluded to a case he had seen in the Middlesex Hospital under Mr. Lawson's care.—Dr. EWART mentioned a case of lymphadenoma which had recently died under his care. The patient was fifty-five years of age and anæmic, and a diagnosis of carcinoma of the stomach was arrived at. The fluid withdrawn was opalescent, and at the necropsy ulceration of the stomach of doubtful character was disclosed, with enlargement of the glands in the abdomen and at the root of the neck.—Dr. ORMEROD said a necropsy on a case of chylous ascites had recently been performed at St. Bartholomew's Hospital and the thoracic duct was found to be normal.—Dr. SHAW knew of a case of chylous ascites at present under the care of Dr. Goodhart in Guy's Hospital.—Dr. SAMUEL WEST related a case of his own which had got well or very much better.—Mr. SHATTOCK had seen two hydroceles filled with chylous fluid.—Dr. MARTIN, in reply, insisted on the necessity of distinguishing between cases of true chylous ascites and those cases which yielded an opalescent fluid, probably the result of fatty degeneration of formed elements, but which was not true chyle at all.

Dr. NORMAN MOORE showed a New Growth in the Liver secondary to carcinoma of the descending colon. The patient was a farrier, aged thirty-nine, who had had about twenty-five attacks of gout, the first when he was thirty-one. He had a tophus in his ear. Eight months before his death he was in good health, but he fell downstairs and broke ribs on both sides, and was therefore obliged to take to his bed. In seven months he lost four stone in weight, being reduced to ten stone. He suffered now and then from constipation, and after one attack passed some blood, and did so more than once. At the end of August his abdomen was observed to be swollen, and when seen in September there was a large, solid tumour in the hepatic region, and the lower edge of the liver was to be felt from the umbilicus to the right anterior superior iliac spine. Its surface felt irregular. The spleen was not to be felt. Nothing abnormal was felt by the rectum; he had no piles. He was slightly jaundiced. He grew thinner and weaker, and on Sept. 30th he passed a good deal of blood from the bowel, and he died Oct. 8th. In the last month of his life the hepatic tumour increased obviously in size. His temperature was normal throughout. The liver weighed 115 oz., and contained many masses of a dense white new growth. The descending colon six inches above the rectum was partially constricted by a dense growth of adenoid carcinoma. The mucous surface was partly ulcerated, and there was much external puckering. There were only one or two infiltrated glands in the neighbourhood, and no other growths in the abdomen. A few very minute nodules of new growth were found in the right lung. The rapidity of the hepatic growth—at the outside two months—and its limited distribution were the chief points of interest, and illustrated the rule of distribution in such cases, as was shown in a table of five similar cases which he had drawn up.

Dr. MOORE also showed a New Growth in the Mediastinal Glands and Left Lung from a boy aged ten years. There was a dense mass of whitish new growth invading the whole upper part of the left lung, and including all the upper mediastinal glands. The growth was a sarcoma consisting of small round cells and spindle cells without alveoli, but with long lines of the normal connective tissue of the lung here and there, the intervening spaces being quite filled with the cells of the growth. Numerous inguinal glands were affected, but the only other discontinuous seat of growth was a small nodule growing inwards from the pleura of the opposite lung. The patient was under Dr. Gee's care for three months, and the history of the growth seemed altogether included in four months. There were signs of pressure on the recurrent laryngeal and on the sympathetic. The left pulse was absent, owing to the complete compression of the subclavian artery, into part of which the growth extended. There was a febrile temperature throughout.

Mr. BERNARD PITTS brought forward an instance of Perforation of Small Intestine caused by a Collection of Orange-pips incarcerated in an Inguinal Hernia. The specimen was taken from a man aged sixty-six, who was brought to St. Thomas's Hospital on March 23rd, 1890. His history was that he had worn a truss from childhood up to the age of twenty-three for a left inguinal hernia; he then left it off, and for the next thirty-three years had no sign of the rupture returning. Ten years ago, however, the patient was conscious of a small lump in his inguinal region, and this gradually increased in size up to the present time. During the last seven or eight years the patient had had pain in the swelling at times, but did not wear a truss. During the fortnight previous to admission he had been frequently sick, and his abdomen had become much distended and tympanitic; the bowels had been kept open by purgatives. On examination the man was found in an exhausted state, with distended abdomen. There was a large irreducible scrotal hernia on the left side, resonant all over, with good impulse, and marked gurgling in the contents. There was some tenderness over the inguinal canal, but no œdema or inflammatory signs. The temperature was normal. As the vomiting continued and was very offensive, an exploratory incision was made, and some inflammatory thickening of the deep coverings was found, and on opening the sac at its lower part a considerable quantity of liquid fæces and the twenty orange-pips shown escaped. Further examination showed that the hernia was of the congenital form, and an opening existed on the convex surface of the loop of adherent intestine at the upper part of the sac; through this opening the orange-pips had evidently escaped, and come into direct contact with the testicle. The general cavity of the abdomen was shut off by adhesion, and there was no evidence of any strangulation. The patient rallied well for a few days, but died of exhaustion at the end of a week. There was a continuous escape of liquid yellow fæces through the opening made. After the operation the distension of abdomen rapidly went down, and all sickness ceased, and he took nourishment well. Mr. Pitts made some remarks on the rarity of the incarceration of foreign bodies in hernia, and referred to two cases previously reported in the Transactions of the Society. Another point of interest in the case was the recurrence of the hernia thirty-three years after apparent cure by wearing a truss.—Mr. BARKER referred to a somewhat similar case. A large umbilical hernia came under his notice, with obscure symptoms, but with a certain amount of incarceration. On operation the gut was easily released, and slipped back into the abdomen. After death ulceration of the transverse colon from end to end was found, and this had probably been induced by the retarded contents of the bowel.

Dr. SAMUEL WEST related a case of Sarcoma of the Liver which occluded the vena cava and hepatic veins, and involved the heart. The patient, a girl of fifteen, was admitted with pain and swelling in the abdomen. The previous history was negative. Two months before admission large veins were noticed in the abdomen, especially after food. Since then she had lost much flesh and strength. Examination revealed nothing except abdominal distension, with enlargement of the superficial veins, and a tumour, movable with respiration, in the region of the spleen. There was no ascites. The symptoms pointed to some portal obstruction, but there was no evidence to indicate its nature. A fortnight later ascites made its appearance, and the abdominal veins became further enlarged. The diagnosis which now seemed probable was that of malignant disease of the liver, involving the portal vein. The girl now rapidly failed in health, became very delirious, and in a few days died, having become deeply jaundiced during the last week of life. Post mortem, a large mass was found on the under surface of the right lobe of the liver above the portal vein. It involved the vena cava inferior and completely plugged it from just above the entrance of the renal veins, and extended up to the heart, where it formed a mass in the inter-auricular septum. There was one nodule in the right lobe of the liver and another in the spleen. The tumour looked like a mass of gummata, but on microscopical examination proved to be a fibro-sarcoma which had undergone extensive caseous degeneration. The points of interest were—(1) the nature of the tumour and its resemblance to gumma, (2) the complete obstruction of the vena cava, (3) its growth up the vein into the heart, and (4) the absence of any definite signs to indicate such obstruction or cardiac lesion during life.—The PRESIDENT said that sarcoma of the liver was rare

at any age. He understood that it commenced in this case near the portal fissure.—Dr. NORMAN MOORE had observed in the sections some peculiar unstained patches, the outline of which, he thought, faintly suggested actinomycosis.—Dr. WEST, in reply, thought these appearances accidental, for he had failed to find them in other sections. He wondered whether gummata projected into vessels in the extraordinary way that the growth did in his case.

Mr. JAMES BERRY showed fifty loose Cartilages which he had removed by operation from a knee-joint. They varied much in size, the largest being an inch and a quarter long and an inch broad, the smallest not much bigger than a large pin's head. The others were of all intervening sizes. All were of a white colour and were smooth and shiny on the surface. None had pedicles, nor was there any evidence that they had ever been attached to the synovial membrane. The chief peculiarity of these bodies lay in their structure. The larger ones consisted of a number of small nodules of cartilage, held together by an intervening network of loose fibrous tissue, the whole apparently surrounded by an imperfect fibrous capsule. No epithelium could be seen upon the outer surface. The smallest bodies consisted of a single nodule of cartilage surrounded by fibrous tissue. It was evident that these small bodies had been derived from the interior of the larger ones. The patient was an otherwise healthy young man, aged eighteen. For six months he had attacks of synovitis in the right knee, which prevented him from doing his work. About two or three weeks before admission to the hospital he had noticed that "something moved about in his knee." He had never had rheumatism or gonorrhœa, nor had he ever, to his knowledge, injured his knee. The loose bodies were removed by direct incision, and the wound healed in a few days. Three months after the operation the patient was seen to be quite well, and no more loose bodies had been detected. As to the mode of origin of these cartilages, the author was unable to express any definite opinion. He considered that they had not been derived from fringes of synovial membrane, because they were all free in the joint, and because that portion of the synovial membrane that was exposed at the time of operation appeared to be quite healthy. At one part, however, at the upper part of the joint, a hard lump could be felt, which was apparently a thickened portion of the synovial membrane, and it was possible that this may have been the spot from which the loose cartilages were derived. He showed also over 400 loose cartilages, which had been removed many years ago from a knee-joint by Mr. T. Smith. These latter, unlike those first shown, consisted of rounded masses of pure hyaline cartilage, about as large as peas, without any fibrous tissue around them. These, too, were free in the joint. In this case the patient was an older man, and it was considered possible that the cartilages in Mr. Berry's case might, if left in the joint, have developed into the condition shown by those of Mr. Smith's case.—Mr. T. SMITH wondered how cartilages such as these lived in such health without direct vascular connexion. He once, when intending to make a new nose from the skin of the upper arm, inserted beneath the skin a piece of fibro-cartilage from the ear. The wound healed well, but at the end of a month the cartilage was completely absorbed. This showed that cartilage could have too much blood-supply.—Mr. ROGER WILLIAMS said that loose cartilages sometimes arose from the synovial fringes, and were pedunculated. As the knee-joint was originally formed by solution of a bar of cartilage, it was only natural to find cartilage cells in its fringes.

The following card specimens were shown:—

Mr. STEPHEN PAGET: Mulberry Calculus.

Dr. H. D. ROLLESTON: (1) Duodenal Pouch; (2) Perinephritic Abscess opening into Duodenum; (3) Loose Body in Peritoneal Cavity.

Recent specimen.—Dr. ROLLESTON: Ulceration and Pigmentation of Large Intestine.

OPHTHALMOLOGICAL SOCIETY.

Presidential Address.—Graefe's Lid Sign.—Recovery from Graves' Disease.—Paralysis of both External Recti, with Contraction of the Internal Recti.

THE first ordinary meeting of the session was held on the 16th inst., the President, Mr. Henry Power, in the chair.

On taking his seat as President of the Society, Mr. POWER paid a graceful tribute to his predecessor in the chair, Dr. Hughlings Jackson. He referred to the address delivered by Mr. Hulke on a former occasion, which embraced a review of the wonderful developments and improvements in ophthalmology within that eminent surgeon's immediate knowledge and observation. Looking back through the year immediately past, there was no startling instance of the discovery of any instrument of research or therapeutic means, except, possibly, in the employment of the aniline dyes in histological investigation. There remained, however, ample fields for work; much still remained unknown in the pathology and treatment of such diseases as sympathetic ophthalmia, white atrophy of the disc, and conical cornea. Glaucoma, acute and chronic, was still not fully understood, and the best method of operating in cataract, and of treating secondary cataract and detachment of the retina, were not yet agreed upon. Mr. Power made a brief allusion to the papers and works on ophthalmology published during the past year, both in this country and abroad, and to the new methods employed for demonstrating by means of lantern slides. He congratulated the Society upon the award of the Middlemore Prize to two of its members, and eulogised the work upon which the adjudication was based. The President referred to the death of Otto Becker of Heidelberg, the author of the carefully executed plates and description of the structure of the lens in health and disease, and to the decease also of M. Caignet. With regard to the Ophthalmological Society itself, there was reason for much congratulation. It now numbers 264 members, who are nearly all engaged in active clinical work. The department is one which for many reasons offers great attractions to men of skill and ability, who are joining its ranks in increasing numbers, and he would venture to remind the younger members of the Society, or rather those who were intending to adopt this branch, of the old adage, "The more the merrier, yet the fewer the better cheer." For while as yet there was ample room for all who would work steadily and well, a time would surely come when there would be a struggle for existence, and the last comers would have to seek "fresh woods and pastures new." To those intending to follow this branch of practice he recommended a more careful preliminary training. They should at least have had a sound mathematical training; they should be familiar with the science of optics; they should have made themselves masters of microscopical methods; they should have good eyes, and should cultivate lightness, steadiness, and precision of hand.

Dr. SHARKEY read a paper on Graefe's Lid Sign. He gave an account of a male patient aged thirty-four, seen a year ago, who suffered for four years from pain in the region of the heart, palpitation, cough, and expectoration, and who was getting worse, but had no other symptoms and had not previously been ill. His family consisted of four in all, who had weak hearts and were nervous. The pulse was 120 and regular, there were no cardiac murmurs, and no hypertrophy of the thyroid gland. The eyes were a little prominent, but not more so than in many healthy people. Graefe's lid sign was well marked. Apart from this, the only things pointing to Graves' disease were rapidity of the heart's action and palpitation. If Graefe's lid sign always occurred in this affection and not in any other the diagnosis might have been made with confidence; but this was not clear. In the course of six months 613 cases of diseases of all kinds were examined for this particular sign, and twelve of them, rather less than 2 per cent., presented it in a well-marked degree. Many others had it so long as they stared at the object held before them, and it was very difficult to prevent them from doing so. A large proportion of healthy people can voluntarily produce the lid sign by staring. Inasmuch, then, as Graefe's symptom is far from always present in undoubted cases of Graves' disease, and is often very well marked in others who undoubtedly have not Graves' disease, it cannot be considered very valuable as a diagnostic sign. With regard to its mode of production, it is clear that there is over-action of the muscle or muscles which raise the lid. There are two muscles which act in this way: first, the levator palpebræ supplied by the third nerve; and secondly, the unstriped muscle of the lid supplied by the sympathetic. Remak showed that irritation of the sympathetic produced elevation and retraction of the upper lid, and the fact that one can voluntarily produce this effect shows that it can likewise be produced through the third cranial nerve. Constant active spasm, however, rarely results from irritation, though intermittent spasm may. Prolonged spasm most frequently owes its origin to paralysis

or weakening of opposing muscles, as is seen in the "*main en griffe*" of progressive muscular atrophy, in the distortions due to pachymeningitis cervicalis, and in many other nerve lesions. Is there evidence in Graves' disease of a weakening of muscles which close the eyes, and are the opponents of those that raise the upper lids? Stellwag von Carion has shown that a very constant symptom of the disease is diminished frequency and incompleteness of the involuntary closure of the lids which goes on so continuously in health. The orbicularis palpebrarum, which effects this movement, and is the opponent of the muscles which raise the lid, being weakened in Graves' disease, and losing tone by inaction, the healthy equilibrium of the muscles of the eye is lost, the opening overpowering the closing muscles, and producing retraction of the upper lid and Graefe's sign. Thus, the infrequency of winking, which Stellwag refers to disease of the centre presiding over this automatic act, is the primary result of disease, and retraction of the lids and Graefe's sign follow as a consequence. This appears to be the most satisfactory explanation. It may be objected that, as there must be a centre presiding over the consensual movements of the lids and eyeballs, which are deranged in Graves's disease, that centre is just as likely to be diseased as the centre which produces the involuntary closure of the lids. This may be so. Still it is unnecessary to presuppose such disease, as we have a satisfactory explanation of the phenomenon without it. Should, however, future observation show that Graefe's lid sign may be present when there is no diminution in the frequency of winking, then we shall have to admit that disease of the centre presiding over the consensual movements of the lid and eyeball is most probably responsible for the lid sign.

Mr. LAWFORD read notes of a case of recovery from Graves' Disease in a female patient aged forty-three, who ten years previously had been seriously ill with all the usual symptoms of exophthalmic goitre, and had been under treatment at a London hospital for some months. She slowly recovered, and had been for the last nine years in good health, except for some liability to bronchitis. She attended as an out-patient at St. Thomas's Hospital for some slight conjunctival catarrh, and it was then noticed that there was marked proptosis, but no other signs of disease; the eyelids were normal in position and movement, the thyroid could not be felt, and there was no cardiac trouble. The patient herself stated that the protrusion of the eyes had not diminished since it first occurred during her acute illness, but with this exception she knew of no symptom left by the attack.—Dr. HUGHLINGS JACKSON, in the course of some remarks upon incomplete or atypical forms of Graves' disease, referred to a series of cases collected by Mr. Roxburgh, but not as yet published, in which exophthalmos occurred without other symptoms of Graves' disease. It was important to know that the disease might pass off, as in the case just recorded.—Mr. POULETT WELLS referred to a case he had seen at Moorfields; a woman with all the usual symptoms of exophthalmic goitre. Rapid improvement took place under treatment by iron and bromide of potash.—Dr. JAMES ANDERSON had met with cases that recovered; but in them there remained considerable pigmentation of the skin. He thought it would be found that Graves' disease, like glycosuria, included a great number of different conditions. At the present time several groups of symptoms were recognised (cardiac, goitrous, ocular, and mental) which were not often all met with together in the same subject. Graefe's symptom was often to be demonstrated, but was not sufficiently constant to be regarded as pathognomonic.—Dr. SIDNEY COUPLAND thought that if the retraction of the upper lid were due to spasm of the levator palpebræ, induced by the lack of opposing force in the orbicularis palpebrarum, it was unlikely it would occur in the act of staring.—Mr. MCHARDY dwelt upon the extreme rarity with which cases were seen after recovery. He also called attention to another point, which might or might not be symptomatic; that was the occurrence of alopecia areata. He had met with it in three cases of exophthalmos, in two of which it was associated with considerable pigmentation of the skin.—Dr. SHARKEY replied to the remarks made upon his paper, and gave additional reasons for the explanation of the lid sign which he had propounded. In the act of staring there was preponderance of action in the levator palpebræ muscle, the orbicularis being perhaps quite normal. In Graves' disease the preponderance was due, not necessarily to over-action of the levator, but to diminished power in the opposing muscle, the orbicularis palpebrarum.

Mr. DONALDSON (Londonderry) made a communication on Paralysis of both External Recti, with contraction of the Internal Recti. Jane K——, now aged seventy, noticed when fifty years of age that the eyes began to turn in, and the deviation steadily increased for about ten years. The eyelids generally remain almost closed, as shown in a photograph, but can be partially raised by the action of the occipito-frontalis. Both eyeballs are rotated inwards and a little downwards, so that the outer margin of each cornea is barely visible at the inner canthus. The deviation is rather greater in the right eye. The movements of the eyes are extremely limited. Perception of light is retained, and the patient complains that a bright light is painful to her. Her general health is good; there is no other paralysis, and no sign or history of gout, rheumatism, syphilis, alcoholism, or injury is obtainable.

The following cases and card specimens were shown:—

Mr. MARCUS GUNN: Cases of Traumatic Mydriasis.

Mr. E. T. COLLINS: Bloodstaining of Cornea and Microscopical specimens.

Mr. PHILLIPS: Bilateral Coloboma of Choroid, Iris, and Lens.

Mr. J. T. JAMES: Vaccine Vesicle of Eyelid.

Mr. SILCOCK: Gumma of Subconjunctival Tissue.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

Obstructive Disease of the Lower Extremity of the Ileum.

THE inaugural meeting of the above Society for the session 1890–91 was held on Oct. 16th, Mr. C. Haydon White, President, in the chair.

An address was delivered by Dr. J. S. BRISTOWE, F.R.S., on Obstructive Disease of the Lower Extremity of the Ileum. Details of four cases to illustrate the symptomatology of the affection were first given. Of these, the first three ended fatally, and in the fourth laparotomy was performed, which failed to give relief owing to the presence of malignant disease. The seat of the disease in all the cases was at or near the lower end of the ileum; but its pathological character varied. In one case the lower coils of the ileum, matted together by old adhesions, formed a tangled mass, occupying the right iliac fossa; in another, a piece of ileum had become kinked from adhesion of adjacent peritoneal surfaces, and opposite the adhesion a small fibrous nodule projected into the lumen of the bowel; in another a sarcomatous growth occupied the ileo-cæcal valve, which, having become intussuscepted in the colon, was found lying beneath the liver; and in the fourth there was a new growth in the wall of the ileum, with scattered nodules in the peritoneum. In all the cases the small intestine above the seat of disease was dilated and hypertrophied, while the colon was contracted; but in no case was the bowel at any part impervious to the finger. The symptoms in all four cases presented a marked similarity. These were for the most part colicky pain of some duration, irregular action of bowels, there being at times constipation, at times passage of thin offensive fæces; general or local distension of the abdomen without tenderness, and sometimes evidence of a deeply seated tumour; visible and frequently violent peristalsis, occurring in paroxysms, which often subsided with loud gurgling; occasional attacks of vomiting. The temperature was normal or subnormal, skin clammy and often dusky; gradually increasing asthenia and innutrition finally culminated in death, which was either preceded or not by symptoms of complete obstruction. The symptoms in these cases resemble those of stricture of the large intestine more than those of any other form of obstruction. Their etiology is obscure, but they may sometimes be due to previous peritoneal inflammation, such as typhlitis, or, possibly, in rare instances, to typhoid fever. The treatment is for the most part palliative, but laparotomy, carefully performed, probably does not add to the patient's danger. After the paper a discussion ensued, in which the President, Dr. Brookhouse, and Dr. Greaves took part. On the motion of Mr. J. White, seconded by Dr. Handford, a hearty vote of thanks was passed to Dr. Bristowe for his valuable paper. Dr. Bristowe replied.

Reviews and Notices of Books.

Clinical Diagnosis: the Bacteriological, Chemical, and Microscopical Evidence of Disease. By RUDOLF V. JAKSCH. Translated from the Second German Edition by JAMES CAGNEY, M.D. With an appendix by WM. STIRLING, M.D.Sc.D. London: Charles Griffin and Co. 1890.

IT is gratifying to observe the steady progress that is being made in the direction of the application of scientific methods to clinical research. It proves that there is a widespread conviction that the evidences of disease, varied and capricious as they may often seem to be, can be subjected to the same rigid principles of examination which the chemist and physiologist have applied to the study of the normal processes of the living body. It tends, too, more and more to bring medicine within the category of the sciences, whilst it cannot fail to throw great light upon the nature of morbid action, and therefore upon the appropriate and rational treatment of deranged health. The work of Prof. v. Jaksch affords a striking example of this application of the methods of science to medicine. So far as we are aware, the book stands almost alone amongst works of this class in the width of its range, the thoroughness of its exposition, and the clearness of its style. Its value has been recognised in many countries, and we may express unfeigned pleasure at its appearance in an English dress. The translator, Dr. Cagney, has done his share of the work in an admirable manner, and besides making, where necessary, material additions to the text, he has been fortunate to secure the assistance of Prof. Stirling in the preparation of an appendix, which brings the subject matter well up to date. The great merit of the book lies in the discriminating way in which the author has collated and scrutinised the numberless observations recorded in literature upon the subjects dealt with. A glance at the ample bibliography to each section (which the editor has placed at the end of the volume) shows how extensive has been the field thus traversed and utilised.

The titles of the various chapters of the work indicate the nature of its contents. These are ten in number, and are as follows:—1. The Blood. 2. The Buccal Secretion. 3. The Nasal Secretion. 4. The Sputum. 5. The Gastric Juice and Vomit. 6. The Fæces. 7. Examination of the Urine. 8. Investigation of Exudations, Transudations, and Cystic Fluids. 9. Secretions of the Genital Organs. 10. Methods of Bacteriological Research. Each of these subjects is treated with a fulness little familiar to the English student, who will be sure to find a great number of facts recorded with which he has previously had no acquaintance. Indeed, the book may be considered as a handbook for the clinical laboratory, and doubtless will be largely used as such.

In the chapter on the Blood we note that for the numeration of corpuscles the author recommends the apparatus of Thoma-Zeiss, and the editor has appended a description of Gowers' hæmacytometer. For estimation of hæmoglobin, von Fleisch's hæmatometer is shown to have certain advantages over Hénocque's hæmatoscope, which requires rather more blood, whilst the lack in the text of any description of Bizzozero's chromo-cytometer is filled by the full account of this instrument given in the appendix. The conditions of leucocytosis, leukæmia, melanæmia, microcytosis, and poikilocytosis are in turn described, and it may be noted that the author has observed the last-named condition in other forms of anæmia than the pernicious variety. The parasites of the blood, including the detection in it of micro-organisms, are next described. The precautions to be taken in investigating the blood for such microbes are fully detailed. Under streptococci we do not find mention of their presence in ulcerative endocarditis. In the next edition also doubtless allusion will be made to the hæmatozoic organisms met with in malaria. Here we only find reference to the distoma hæmatobium and filaria sanguinis hominis among the animal parasites of the blood. The spectroscopic changes in the blood and the changes wrought by various poisons, the presence of urea, uric acid, sugar, &c., are discussed, and full directions for their detection given.

The chapter on the Sputum is of much interest and value. It includes an account of the naked-eye and microscopical characters, and the chemical changes, and then in a summary form the subject from the standpoint of the chief affections of the lungs and bronchi is reviewed. In this country we have certainly not advanced so far as our Continental *confrères* in the examination of the gastric juice as an aid to the diagnosis and treatment of diseases of the stomach. It is well, therefore, that we should have the opportunity of judging the extent to which such examination may be carried and the methods for its conduction. The fluid is withdrawn from the stomach during fasting by means of the gastric sound, and may be examined in respect to its constitution in pepsin, milk-curdling ferment, and acids (inorganic and organic). Practically, the search after deficiency or excess of hydrochloric acid is the most ready of application, since there are many tests by colour reagents that are available. These are fully described in the work. The examination of vomit includes a useful exposition of the methods to be employed in cases of poisoning. The subject of the fæces, too, is of considerable practical importance. The account here given comprises a description of intestinal parasites, including the detection of the bacilli of cholera, typhoid fever, and tubercle, and also the chemical examination of the excreta. The characters of the stools in various intestinal affections are also described. The subject of the urine naturally occupies considerable space, and one cannot fail to be struck by the systematic and exhaustive manner with which it is treated. Excellent as are the sections dealing with the microscopical characters of urine, we think that those in which its chemical investigation is discussed are even better. There is a fund of information here which, except in special treatises, is not to be met with in any similar work. It seems, too, to be a subject which the author has himself thoroughly mastered, and it opens up a wide field for the investigator. The section closes with a description of the characters of the urine in disease, the urine of toxic states, and the detection of certain drugs in the urine.

From previous acquaintance with this work of Professor v. Jaksch, and with a feeling of satisfaction that it has been so worthily produced in English, we have no hesitation in commending it highly. It may indeed be regarded as a standard work, and one, too, which is as trustworthy as it is scientific. It is hardly possible to estimate the value which such a work must necessarily have in promoting accuracy in clinical methods and in enlarging the scope of clinical observation, with results that cannot fail to exert a very material influence upon the progress of medicine. In conclusion, it must be pointed out that the numerous and artistic illustrations form a great feature of the work, and that these have been admirably reproduced; whilst the publishers are to be commended for the style in which they have brought out the book. It ought to obtain a wide circulation.

Dental Surgery: a Manual for Students and Practitioners. By HENRY SEWILL, M.R.C.S., L.D.S. Eng. London: Baillière, Tindall, and Cox.

IN taking up Mr. Sewill's book, we scarcely recognise his former *brochure* upon the same subject, and after attentive perusal we lay it down with something like regret that its present limits had not been extended. The aim

of the manual, as stated in the preface, is to supply all dental information needed by the surgeon or practitioner of medicine, and at the same time a solid foundation of knowledge for the dental student; but any book in which the endeavour is made to combine the one and the other will be too small or too large as a whole, and will treat certain subjects too curtly or too diffusely. Mr. Sewill's manual, like all his writings, has the charm of extreme lucidity; there is no mistaking what he means, no ambiguity. The chapters on Histology and Caries, which are fully illustrated with micrographs derived from various sources, are exceptionally good. The treatment of the teeth in infancy and early childhood and the general hygiene of the mouth, which subject is so often omitted in dental manuals, are practically dealt with. As a whole, the manual is brought well up to date, is practical, and few readers, whether medical practitioners or dentists, can fail to benefit largely by its perusal. The sins are rather those of omission than of commission; amongst the latter we must make exception to the statement that the best root filling, after the removal of the pulp, is tightly packed antiseptic cotton-wool, and that the only treatment of polypus of the pulp is extraction of the tooth, this being in all much better than removal of the polypus. Four pages only are devoted to pivoting, porcelain inlays, crowning, and bridge work—subjects of considerable practical interest; whereas four times this space is given to "odontomes," which, after all, are only surgical curiosities. One word about the index; this for a manual can hardly be too full, and that of this work certainly does not err in that direction.

A Dictionary of Applied Chemistry. By T. E. THORPE, B Sc. (Vict.), Ph.D., F.R.S., Treas. C.S., Prof. of Chemistry in the Normal School of Science and Royal School of Mines, South Kensington. Assisted by eminent contributors. In Three Vols. London: Longmans, Green, and Co.

THE late Mr. Henry Watts, in his great "Dictionary of Chemistry," was able to present a complete history of his subject, including the various branches of pure, analytical, industrial, and physical chemistry. But the progress of scientific discovery has of late been so rapid that it has been found necessary in the new edition to divide the subject and to curtail the plan considerably. "Watts's Dictionary of Chemistry," now appearing under the editorship of Dr. Forster Morley and Mr. Pattison Muir, deals with pure science, and analytical and technical details are rigorously excluded. Even with these limitations the book resembles a lexicon rather than a treatise. When completed it will be of the highest value, but will be used, like Beilstein's "Organische Chemie," mainly as a work of reference. Prof. Thorpe has allowed himself a somewhat wider range, has not hesitated to trench occasionally upon the province of the sister work, and has occupied a large portion of his own with articles which possess many of the characters of special treatises. The editor has been of course the largest contributor, and seems to have supplied the great bulk of the shorter articles as well as some of the longer ones. Here and there his articles, especially some of the shorter ones, might have been left to the companion book, but in the great majority of cases they come strictly within the limit of the title.

In the new volume thirty assistant contributors have aided the work of the editor. Many of their articles lie outside the domain of this journal, but the term "applied chemistry" has been taken in so liberal a sense that much of the matter of the book will be found to be of great value to all our readers. If we notice a few of them it is with no intention of denying the equal value of others.

The Department of Drugs has been chiefly assigned to the experienced hands of Dr. Senier, whose articles on Balsams, Camphors, and Digitalis may be taken as typical. The chemistry of the balsams is still very imperfect, although many important substances, including benzoic and cinnamic acids, have been obtained from them. Until the true nature of the terpines, camphors, and resins is discovered, the causes of their medicinal value must remain somewhat obscure. Professor H. H. Robinson, of the Imperial College, Canton, has contributed an article on Albuminoids, which is valuable as far as it goes, but imperfect in extent. The writer arranges the albuminoids in seven classes, and describes most of these classes succinctly and well. But the members of the last class, the peptones, receive but a few lines of notice, although they possess nowadays a very high degree of technical importance. Probably they and the methods of artificial digestion by which they are prepared will be described in a subsequent volume. Mr. Warrington has written the articles on Cereals and on Citric Acid, the former of which contains many valuable tables and much matter which will be useful in practical dietetics. Disinfectants are described by Mr. A. H. Allen, who shows impartiality as well as knowledge in his account of the very numerous elements and compounds to which the general term has been applied. He has also given analytical details for which medical officers of health will be grateful. It is impossible to discuss here the many contributions to general technical chemistry which the volume contains, but the article headed "Cements," supplied by Professor W. N. Hartley, may be noticed as valuable not only for its careful compilation and elaborate tables, but for the exhaustive bibliography with which it concludes. No better editor than Professor Thorpe could have been found for this greatly needed book, and it is certain that "Thorpe's Dictionary" will not easily be displaced from its front rank among English scientific work.

On the Cure of the Morphia Habit. By OSCAR JENNINGS, M.D. (Paris). London: Baillière, Tindall, and Cox. Pp. 112.

THE morphia habit is undoubtedly on the increase in France, where the author of this little work practises, and we regret to say that it is, though to a less extent, also on the increase in England, and especially, we believe, amongst professional men. These circumstances make any serious contribution to the subject of value. The work before us is of unpretending size, but it contains the pith of a wide experience, and is full of practical hints and references to cases which have been under the care of the author. It is very pleasantly written; but it is perhaps to be regretted that it is not a little more systematically arranged, and headings given to the chapters, especially as there is no index at the end.

Of the different methods of breaking through the habit, Dr. Jennings declares unhesitatingly in favour of the gradual method, as being attended by less inconvenience to the patient and less fear of dangerous symptoms and complications. He further suggests a plan, which so far as we know has originated with himself, of substituting for each diminution of the hypodermic dose the administration of a certain quantity of morphia by the mouth or rectum. Many and various are the drugs which have from time to time been suggested to combat the unpleasant symptoms that arise, and the author gives a pretty complete account of them up to date. He has, in conjunction with Professor Ball, made careful experiments on the power of sparteine and nitro-glycerine to combat the circulatory disturbances which attend the period of amorphinism, a description of which appeared in our columns some years ago.[1]

Space forbids us to give more than a passing notice of

[1] THE LANCET, June 25th, 1887, p. 1273.

the work, but it is one which we can most heartily commend to the study of those who desire to relieve their patients of the thraldom of this terrible habit.

Sewage Disposal Works; a Guide to the Construction of Works for the Prevention of the Pollution by Sewage on Rivers and Estuaries. By W. SANTO CRIMP, Assistant Engineer to the London County Council &c. With tables, illustrations in the text, and thirty-three lithographic plates. London: Charles Griffin & Co. 1890.

ALL persons interested in sanitary science owe a debt of gratitude to the author of this book, but it will be especially valuable to sanitary authorities and their scientific advisers. Mr. Crimp, whose experience amply qualified him for the work, has not only given an account of the general principles of sewage treatment, but in the second and larger portion of his book has presented plans as well as descriptions of many of the most important sewage works of England. It is this latter portion which possesses the greatest practical value, for the carefully prepared drawings permit of an easy comparison between the different systems. A short summary of the contents of the volume will show its eminently practical and useful character.

Part I., containing nine chapters, deals with generalities. After a short introduction, in which the history of legislation is briefly sketched, a chapter is devoted to the conclusions reached by various committees and royal commissions in regard to the treatment of town sewage. The latest, which are printed *in extenso*, are the conclusions and recommendations of the Metropolitan Sewage Discharge Commission of 1884. These last form the most important contributions to our knowledge, and have been fully and repeatedly discussed in THE LANCET. Then follows an account of the hourly and daily flow of sewage with its variations according to population density, physical aspect, &c. In connexion with this subject it is convenient to remember that in London the average flow of sewage is thirty-six gallons per head per day. The separate system receives a chapter to itself.

The separation of sewage from rainfall is an old dream of sanitarians, and is embodied in a well-known axiom, "The rainfall to the river, the sewage to the soil." It has been partly adopted at Portsmouth and elsewhere, but insuperable difficulties have hitherto prevented its general adoption, for not only does it involve a double system of sewerage and house drainage, but it permits of the discharge into watercourses of enormous quantities of foul matter from streets and courts. Sir Joseph Bazalgette proved long ago that its adoption in London would involve an expense which could not for a moment be contemplated. Of the remaining chapters in this part, one of the most important is devoted to the various chemical processes which have from time to time been recommended for the clarification of sewage. In some places, as at Birmingham, lime only is used, and this seems justifiable in cases where manufactories contribute large quantities of acid salts to the sewage; but in general a very alkaline effluent is to be avoided, and the conjoint use of sulphate of alumina, sulphate of iron, or some other precipitating agent is desirable.

The A B C process, and also some others as yet imperfectly tested, are impartially although shortly described. The author fully admits that precipitation is not purification, and that only in certain cases can the effluent from the precipitating tanks be properly added to a river. The difficult question of the disposal of sewage sludge is pretty fully discussed in Chapter VIII., and the system adopted, or, as we should put it, the colossal blunder perpetrated by the Metropolitan Board of Works, is described in Mr. Dibden's words without comment by Mr. Crimp. According to this scheme, which is now in process of execution, the sludge from the London sewage, amounting to 3000 tons per day, is to be carried in ships to sea and there discharged. The last chapter in this part gives valuable information in regard to the preparation of land for sewage irrigation, with remarks on the sanitary aspects of the question, the theory of nitrification, &c. We do not, however, find any remarks on the converse process of denitrification, which plays a very important part in sewage changes, particularly in rivers.

Part II. consists, as we have already said, entirely of well-illustrated descriptions of sewage works. The author states that he has been unable to obtain the particulars relating to some good examples. In some cases these unavoidable omissions are to be regretted, and we do not doubt that they will be supplied in the next edition. We wish particularly that some more information with regard to the new works which the London County Council took over from the late Metropolitan Board of Works could have been supplied, but doubtless the official position of the author rendered this impossible. No less than twenty-one important works are, however, described and illustrated in greater or less detail, and very valuable information is given not only as to the engineering peculiarities, but the cost of construction and working of each. In these various works almost every important method of sewage treatment is illustrated,—simple irrigation, intermittent filtration, precipitation by many methods, precipitation supplemented by irrigation, and sea discharge. The proper method in the majority of cases is undoubtedly precipitation with subsequent irrigation. The reports of the Metropolitan Sewage Discharge Commission leave no doubt that this is the system which sooner or later must be applied to London.

The Treatment of Diseases of the Nervous System. By C. W. SUCKLING, M.D. London: H. K. Lewis.

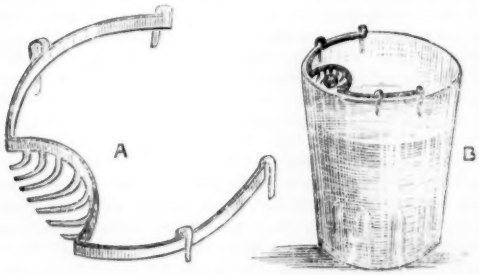
THIS volume is professedly supplementary to a work by the same author on the Diagnosis of Diseases of the Nervous System. He has adopted the plan of making an alphabetical index of diseases for the most part, and after defining the disease he has described the appropriate treatment. But he has departed from what was apparently the plan of the work by including in the index not only diseases, but also symptoms, and even methods of treatment. Thus there are headings for locomotor ataxy and for lightning pains; but, curiously enough, although massage has a heading to itself, the recently fashionable treatment by suspension is only mentioned as treatment, and, so far as we can see, no full description of the method is furnished. Under a good many of the headings symptomatology and even differential diagnosis are discussed at considerable length. We find also such diseases as rheumatism and typhoid fever described with special reference to their nervous complications. It will thus be evident that the work labours under all the disadvantages which a treatise on treatment must have when it is detached from a systematic account of the morbid conditions of which the therapeutics are discussed. The directions given for treatment, however, are on the whole excellent. They are full and precise, though in some cases dogmatic, as was to be expected from anyone with large experience, but we do not think that the book as a whole will add to the reputation of its author.

ANOTHER GIFT BY LORD DERBY TO BURY.—Lord Derby has intimated to the Town Clerk of Bury that he will give £1000 towards providing gymnastic appliances in the two recreation grounds in the Walmesley-road and Manchester-road in that town. His lordship formally opened the Manchester-road ground last year, and has previously contributed £10,000 to the recreation grounds in the borough.

New Inventions.

"PILL-TAKERS."

MANY people of undoubted veracity declare that they are wholly unable to swallow pills. Some spasmodic movements of the tongue or irregular contractions of the pharynx balk every conscious endeavour, or at least keep the pill in motion in the mouth until its flavour becomes unpleasant. A "pill-taker" has been introduced by Messrs. Joseph Yates and Co., 9, Coleman-street, E.C., to overcome these



difficulties, and its action is so extremely simple and so very satisfactory that we do not hesitate to commend it to the notice of our readers. It is adjusted on the rim of a tumbler or wine glass, and the pill is placed in a small grating. The pill is then simply washed down the throat, almost unconsciously, being mostly carried down with the first mouthful of fluid. The "pill-taker" is neatly made, and from its simplicity it should find ready reception when once tried.

ANTISEPTIC WOOD WOOL.

WE have received from the Sanitary Wood Wool Company, Limited, of 11, Hatton-garden, E.C., two examples of the recent adaptation of antiseptic wool which present advantages. 1. Hartmann's Patent Wood Wool Gonorrhœa Bags. The bag is made of muslin, the lower part of which is lined with wood wool, impregnated with corrosive sublimate. To each bag, on either side, is attached a thin tape, of sufficient length to fasten round the waist. The bags possess advantages over other methods used to secure cleanliness during these attacks; being absorbent, they prevent the discharge from soiling the clothes of the patient, are antiseptic, and easily applied. We have tried them in hospital out-patient practice, and the patients speak highly of them. As they are not expensive, the patients have no scruple in destroying them and using a clean one. 2. Hartmann's wood-wool vaccination pad. These are square-shaped muslin bags, enclosing a layer of absorbent wool, which has been prepared with corrosive sublimate; the pads are fixed in position by two tapes, which pass round the arm, and by a third which goes round the chest. The advantages claimed for them are that they protect the arm from external violence, absorb all discharges, and diminish the risks of septic absorption. They also minimise the risk of an attack of erysipelas.

THE RABIES ORDER.—The Board of Agriculture has issued an amendment to the Rabies Order, stating that muzzling shall not be necessary in the county of Chester and in the boroughs of Birkenhead, Chester, Congleton, Crewe, Hyde, Macclesfield, Stalybridge, and Stockport, in the case of "dogs which have on a collar, with the name and address of the owner of the dog legibly engraved on such collar."

ENTERIC FEVER IN INDIA.

To the Editors of THE LANCET.

SIRS,—The progress of sanitation and the increased prevalence of enteric fever suggest an anomaly which at first is a little difficult to understand. Personal observation and experience favour a simple explanation. The increase of enteric fever is, I believe, a mistake. I do not mean to imply that the returns of the disease do not show a marked increase, but I am inclined to think this is due to a prejudice—I might even say a fashion—of diagnosis. I well remember being told by a surgeon-general of recognised ability that enteric fever *never* occurred in India, and more than one medical officer can testify that the returns submitted to this officer were invariably sent back for correction. In consequence, enteric fever was of rare occurrence. On the other hand, I have met with medical officers who looked on nearly every case of remittent fever in which the temperature remained abnormally high for over a week as cases of enteric fever. I have little hesitation in saying a medical officer who entertains strong views on any particular subject has a bias of diagnosis. This peculiarity is not confined to army medical officers in India. It also exists in England. A specialist on kidney disease invariably discovers some defect in the urinary organs; a physician who devotes his attention principally to the liver recognises some obscure hepatic trouble; and the heart doctor generally hears some muffled bruit. To avoid any misunderstanding, let me at once say I am not making an accusation of a want of honesty of diagnosis, but only that a preconceived idea is an important factor in the nature of a diagnosis. It is this fact which partially accounts for the increase or diminution in the returns of enteric fever. There is, however, another reason of perhaps even greater weight, and one which I have on several previous occasions advanced. It is that in India there are two varieties of enteric fever, or I would prefer to say that there is enteric fever and enteroid fever. I understand by the diagnosis of enteric fever the presence of certain recognised symptoms and lesions, and I contend that in the absence of them it is misleading to call the disease by that name. Let there be no mistake. I do not state that every symptom of enteric fever is necessarily present, but that certain symptoms, as, for instance, the enlargement of the spleen, are always present in a genuine case of enteric fever. In enteroid fever the characteristic features are invariably absent. Enteroid fever is a sporadic disease, which originates in spite of pure water, perfect drainage, and good sanitation. Unlike enteric fever, the bowels are usually constipated, though diarrhœa may result from irritation caused by the presence of the accumulation. True lenticular spots are absent. The spleen, unless influenced by malaria or some disease, *per se*, is not affected. The intestines may be quite normal or may be implicated in any degree, from congestion to ulceration. The peculiarity of these lesions is that they are diffused and scattered, involving any part of the tract of the small intestines, and sometimes of the colon. The temperature is more suggestive of remittent than enteric fever, though this is not always so.

So far my remarks are based on practical observation of other medical officers and my own cases of so-called enteric fever. I will now indulge in a speculative theory, and suggest that the sudden atmospheric change of temperature, of so frequent occurrence in India, acting on an overheated system, produces a severe chill, which results in causing in some cases congestion of the lungs, in others hyperæmia of the liver or spleen, but in the majority of cases catarrhal inflammation of the intestines. Without entering upon the details of the cases which have come under observation, I would advocate that under any circumstances it is advisable to restrict the term "enteric fever" to that disease which owes its origin to some sewage metamorphosis, and that all those cases which arise, so to speak, *de novo* should be differentiated by some other name. The adoption of this plan would ensure greater uniformity, if not accuracy, of diagnosis, and would settle the question whether the increased prevalence of enteric fever is due to fact or fancy.

I am, Sirs, yours obediently,

G. SHERMAN BIGG, F.R.C.S. ED.,
Late Staff Surgeon, Allahabad, India.

Victoria-street, S.W., Oct. 18th, 1890.

THE LANCET.

LONDON: SATURDAY, OCTOBER 25, 1890.

IF anything could damp the ardour of reformers of the constitution of the Royal College of Surgeons of England it would be the report from the Council for the collegiate year from July, 1889, to July, 1890, which is to be presented to a meeting of Fellows and Members of the College on Thursday, Nov. 6th next, at 3 P.M. It is significant that this meeting is styled *a* meeting of Fellows and Members, and not *the annual* meeting, and the so-called report is the usual official record of the proceedings of committees, and of the Council, very prudently edited, together with the returns of the results of the several College examinations, and a statement of the College receipts and expenditure during the collegiate year which forms a regular portion of the College Calendar. This report, weighing two ounces and a half, contains fifty-three pages of matter, and from beginning to end there is not a line or a word dealing with the interests of the Fellows and Members as part of the body corporate or calculated to satisfy their legitimate desires and aspirations, as the following summary will show.

The first six pages are devoted to the reports of the committee on the extension of the College premises. From these we gather that the alterations and improvements sanctioned comprise pulling down No. 43, Lincoln's-inn-fields, with an allowance of £45 to the College for old materials; erecting a new large museum on part of the site, at an approximate estimate of £11,000; supplying wall cases, pedestals with hinged leaves, and fittings for the new small museum, for £1451; providing additional fire apparatus for the protection of the two new museums and the College buildings, at a cost of £562; and providing a granolithic forecourt, railings and gates, &c., for the conservator's house, for £86 15*s*. Four pages deal with the proceedings of the Joint Committee of the two Royal Colleges on the Extension of the Examination Hall buildings; six with the proceedings of the joint committee on the educational and scientific uses to which the new building on the Embankment is to be applied, and as to its maintenance and management; three with the proceedings of the joint committee on the fittings for the new buildings on the Embankment; and four with the proceedings of the joint Laboratories Committee. From the balance sheet it appears that half the outlay on account of Extension of the Examination Hall alone cost £6825, and to this, we presume, must be added the cost of electric lighting, internal fittings, annual expenditure for maintenance, salaries of director and secretaries, and fees to members of committees. Ten pages are concerned with the proceedings of the Committee of Management, relating chiefly to the conditions of admission to examination for the diploma of Public Health, as to which there was a slight passage of arms between the Council of the College and the General Medical Council, the revision of the synopsis for the examination in chemistry and chemical physics, and other details of the medical curriculum. The Council has adopted the recommendation of the committee that the period of professional study should be extended from four to five years. Four pages are occupied with Mr. MARSHALL'S letters, reporting, as the representative of the College, the proceedings of the General Medical Council, and four with the proceedings of the College and the committee of delegates on the question of the reconstitution of the University of London. It is satisfactory to note that, in response to a communication from a Member of the College, a committee was appointed to investigate the recommendations of Lord CAMPERDOWN'S Committee on the status of army medical officers, and that this resulted in the President addressing a letter to the Secretary of State for War, pointing out that withholding strictly defined army rank and titles from medical officers of the army places them in a position of inferiority which leads to constant annoyance and early resignations, and is very injurious to the service, and urging that steps should be taken to carry out the recommendations contained in the report of Lord CAMPERDOWN'S Committee. The few remaining pages of the report relate to appointments to the executive of the Father DAMIEN Memorial Fund, letters of condolence to the immediate relatives of the late Mr. HAYNES WALTON and Mr. ALEXANDER SHAW, the removal of the name of a Member of the College convicted of theft, and the results of College elections.

We have made one omission. Exactly eighteen lines, including headings and with marginal references, are assigned to the bare record of the adoption of the resolution passed at the meeting of Fellows and Members on Nov. 7th, 1889, in favour of securing to the Members of the College a just representation in and upon the governing body. After seven years of agitation, meetings, conferences, deputations, discussions, the formation of two active Associations, one of the Fellows and another of the Members, and the continuous sympathy and support of the medical press, not one of the fundamental principles affirmed at the general meetings at the College has been accepted by the Council. The force of mere passive resistance resting on the letter of Charters which have overridden an Act of Parliament, and on the influence of an extensive official patronage, suffices to check reasonable reforms and to deny to the Members moderate concessions approved by a very large portion of the profession. The resolutions passed in favour of investing Fellows and Members with a larger share in the management of the College, and of preventing the Council from making alterations in the constitution or relations of the College without the consent of the Fellows and Members convened to discuss such alterations, are met by the continued exclusion of Fellows and Members from consultative functions and by independent efforts on the part of the Council to secure for the Royal Colleges the power of conferring degrees and by negotiations with the University of London, unsanctioned by and even unknown to the body politic and corporate. The resolution in favour of an annual meeting and the presentation of a report for reception, approval, and adoption is answered by issuing in a separate form a section of the College Calendar, and summoned *a* meeting of Fellows and Members to receive it.

The resolution affirming the principle of consulting the body corporate before committing the College to extraordinary expenditure is answered by an extension of the College premises and of the Examination Hall buildings, involving the expenditure of thousands of pounds and a heavy sale of stock. And so when the Members of the College ask for a limited representation on the Council, the antagonists of the movement can cry with a louder voice, "Look at our museums!" The children of the College have asked for bread and the Council of the College has presented them with stones.

NO one can fail to read the admirable address which Dr. ANDREW delivered before the Royal College of Physicians on St. Luke's Day without being struck by the thoughtfulness and sincerity which characterise it. Seldom has a Harveian oration been more skilfully adapted to the needs of the present, or been more full of so much valued criticism; and all expressed in language well fitted to the occasion, vigorous and stimulating, and calculated to excite reflection. It is by such orations that the memory of HARVEY is best preserved, for in them we are called on to think, not merely of the great work he did, but of the manner in which it was done, when he initiated that revolution in medicine which replaced dogma and authority by scientific method and observation. It may be true, as Dr. ANDREW holds, that in the present time of facile publication and the compilation of books, we not only depart from the wise maxims of HARVEY, but bury the grain of truth amidst a mass of worthless chaff. But it is nevertheless certain that this very fact is evidence of the widespread desire to add to the sum of knowledge; and it may well be doubted whether anything like the progress that has been made within this century in pathology and medicine could have been effected by the universal adoption of any golden rule of reticence. Undoubtedly there is much that is useless and ill-digested in the medical literature of to-day, and many a one contributes to swell its mass who has no message to give like that of HARVEY. Still, the tendency is much more than it used to be towards accurate record and cautious inference. In the multiplication of medical societies, where observations are related and criticised, and facts are being slowly added from individual experience, we have an example of the modern method of medical inquiry. This, we maintain, is in its way following on the lines laid down by HARVEY; and although some are rash enough to generalise upon isolated facts, others are content to record as faithfully as they can and to leave to the future the task of accumulating the fruits of their experience and deducing therefrom some general truths. This labour may seem to involve a great waste of energy and much needless repetition. It is not, however, wholly in vain, but is often necessary and useful. The great desideratum is that the work should be done with deliberation and exactitude, and no one can dissent from Dr. ANDREW'S appeal to pursue our medical observations in the scientific spirit.

Naturally, in treating of such a theme the orator was led to consider the relationship between physiology and medicine, and we commend his contrast of their several aims to consideration. He well pointed out the impossibility of investigating disease in the human subject by the same methods employed by the physiologist in his inquiries, but he did good service in reminding us that pathology has rendered as much service to physiology as physiology has given to medicine. Nevertheless, great as has been the advance in each field, the mutual help they afford to one another is, after all, comparatively small. In an eloquent passage Dr. ANDREW points to our impatience at the bedside of the suffering, where we are constantly beset with a sense of our ignorance, and so often have to blunder on in the dark, or depend upon the dictates of an experience which may have no scientific basis at all, and which may be fallacious. Our art is replete with empirical facts, which now and again are shown by newer knowledge to be capable of scientific explanation, but the majority of which are simply empirical still. The history of remedies is full of examples of this, and were it not for the faith we have in the teachings of "experience" we might well slide into absolute scepticism, and rely solely on the *vis medicatrix naturæ*. But that quinine cures ague, salicin and colchicum control rheumatism and gout, and opium relieves pain, are definite tangible facts, which accumulated experience has proved, but of which the scientific explanation is as yet largely if not wholly hypothetical. For all that, we believe that never was it more necessary to enforce the lesson, so ably pointed by the Harveian orator, of caution in inferences as to the action of drugs. There is a passion for "new" remedies at present which is hardly creditable to an enlightened profession, and on the slenderest grounds such drugs are often vaunted as panaceas and accepted as such for a brief space, when they fall into oblivion. MOLIÈRE would find ample scope and justification for his satire even in these days of modern medicine, and Dr. ANDREW'S illustration of the remedies employed for the control of hæmoptysis might well afford matter for the cynic to dwell on.

But Dr. ANDREW did more than this. He showed that even when we are treating hæmoptysis on the assumed scientific basis of reduction of the blood pressure we may be employing means which have either no effect on the pulmonary circulation or the very opposite effect to that which is expected of them. His contribution to the physiology of the pulmonary circulation and to the action of various drugs in influencing the blood pressure within the pulmonary artery is one which should bear good fruit. Admirable as an illustration of the *nexus* between physiology and medicine, it was most fittingly introduced into an oration commemorative of WILLIAM HARVEY. In its practical adaptation to the medical art it may be of great value; whilst as tending to demonstrate the ignorance in which we have hitherto worked, it will come to many as a revelation, which, if it weakens faith in some classes of remedial agents, may eventually point the way to the employment of others, the operation of which can be more accurately explained, and the use of which may be an invaluable gain to our resources.

THE report of the inquiry by a Committee of the Corporation of the City of London as to the water-supply to London will be read with interest alike by water consumers and by the several companies' shareholders. As the result

of the inquiry the committee who have conducted it have recommended the constitution of a special authority to purchase and take over the undertakings of the water companies, and the committee believe that this can be effected to the financial benefit of the consumers. The value of the stock of the eight companies supplying London is estimated by Mr. WOOD to be £33,444,506. The assumed net profits of the London companies available for dividend—i.e., after providing for interest on the preference and loan capitals—amounted in the year 1889–90, according to Mr. STONEHAM, to £939,806. The committee are advised by Mr. SCOTT, the City Chamberlain, that the capital required can be borrowed at 3 per cent., and thus the interest would amount to £831,794, leaving a balance of £108,012 available for sinking fund or other purposes.

Thus there would be an immediate gain to the water consumers, and if the water-supplies were above suspicion and the plant of the companies in good order, there can be no doubt as to the desirability of the purchase of the undertakings of the companies on this basis. The committee evidently contemplate that in one sense too high a price might be paid, and yet the purchase might in the end be made profitable to London. They quote the experience of Glasgow, which shows that a corporation may pay in excess of the actual value of an undertaking, and yet derive profit from the transaction. In London, however, the financial success of the venture largely depends upon the continuance of the present sources of supply, and these we are learning more and more to distrust. We have no hesitation in saying that if, after the purchase has been effected, London is obliged to abandon the present sources, and obtain its supplies from a distance, the price of water, instead of being less than is now paid, will be largely in excess.

To an extent, the water companies are masters of the situation. Unless the question be settled during the next session, the effect of the quinquennial assessment will be to largely increase the compensation to be paid to them. The bargain which may be made to-day will be impossible in a short time, and it remains to be seen whether the present generation will have sufficient interest in posterity to take this burden upon themselves. The position of the committee as to the constitution of the proposed water authority is interesting. They would have represented upon it the Corporation, the London County Council, and the other sanitary authorities outside the county of London within the water area. But they claim that regard should be had to the fact that the City constitutes one-eighth of the rateable value of the county. With this claim is another, that in future water consumers should have the option of being supplied by meter. If the latter point were conceded the claim of the City for special representation would be less easy to maintain, for there is but little doubt the majority of occupiers of business houses in the City would elect to pay for their water in proportion to the amount consumed rather than upon the rateable value of their premises, and thus the position of the City would sink in importance in this matter. The City, moreover, is represented on the London County Council, a body the position of which the committee recommends should be freely acknowledged and provided for.

The demand to be supplied by meter raises, however, other large questions which are not easy of settlement. Now, rich London pays for poor London, water being regarded as a sanitary necessity which, even in the interests of the rich, should be freely available for the poor. If the receipts of the proposed water authority are to be collected on another basis than that of the present, it is not at all evident that the financial prospect the Committee puts forward would be realised.

It is understood that the London County Council are themselves likely to inquire into the whole matter, and it is probable no speedy action will be taken until this inquiry is complete. The lessons to be derived from the action of the City corporation are instructive, and it may be premised the investigation by the County Council will not be less valuable. The question will then be ripe for settlement, and, we trust, in time for submission to Parliament during the coming session.

MR. DALE JAMES, in his presidential address to the Sheffield Medico-Chirurgical Society, took as his keynote the influence of bacteria in the production of diseases of the skin, and predicted that "the victories of the immediate future in the domain of dermatology will be gained through the recognition of the immense possibilities of bacillary infection." This is doubtless true to a very large extent, and we have only to look back a very few years—before, in fact, PASTEUR, LISTER, and KOCH had given us the result of their labours—to find that the only diseases of parasitic origin were, on the vegetable side, those due to the hyphomycetes producing favus, the various forms of tinea trichophytina, tinea imbricata, and tinea versicolor, and perhaps the fungus-foot of India; while on the animal side were the acarus scabiei, the chigoe, guinea-worm, filaria sanguinis hominis, and the harmless demodex folliculorum, to which are to be added the different kinds of lice and a few other accidental ectozoa. To the animal group we have added very little until the last year or so, in which DARIER'S researches render it probable that the coccidial forms of life called psorosperms play an important part in the production of some diseases, such as Paget's disease and the rare affection called by DARIER "psorospermose folliculaire végétante"; while other observers have thought that these organisms are present in rodent ulcer and molluscum contagiosum. What the exact interpretation is of the presence of these low forms of animal life remains to be proved, but it may be that a new and very important chapter of pathology, not only of the skin, but of many internal organs, is about to be opened up. All this, however, is as nothing compared with the etiologically and practically important part played by bacteria and micrococci in disease of the skin. At present we are bewildered by their numerous varieties and ubiquity, but what we already know and what we may fairly conjecture about their influence afford bright promise for the future.

The diseases acknowledged to be bacillary are leprosy and rhinoscleroma with their special bacilli; also the group due to the tubercle bacillus, lupus, struma, tubercular ulcers, and, according to RIEHL and PALTAUF, verruca necrogenica. When we turn to the diseases due to pus cocci, chiefly staphylococcus aureus and albus, we have impetigo con-

tagiosa, boils, carbuncles, the impetiginous form of eczema, and, as a result of mixed infection, kerion of head and beard, and acne pustules; while probably ordinary sycosis is also the result of similar or identical cocci. Some cases of purpura have already been proved by RUSSELL and CHEYNE to be due to bacterial emboli, and KOCH believes in a still further extension of their influence in the production of purpuric extravasations. Among diseases which, on clinical and therapeutic grounds, are also probably due to bacilli or cocci, though actual proof is still wanting, are seborrhœa, capitis and corporis, the grouped comedones of children, and perhaps the more common form in adults, pityriasis rosea, common warts, the multiple gangrenous dermatitis of infants, and such tropical diseases as yaws, verruga Peruana, and Oriental boil, unless these last are to fall under the domain of the new rivals, the psorosperms.

An extremely important development of the theory, if true, is the one which UNNA, in opening the debate on Eczema at the late British Medical meeting at Birmingham, put forward, on what he considers sound *a priori* grounds—viz, that the multiform dermatitis which we include under the term of "eczema" is entirely of parasitic origin, though he does not pretend to have found any particular organism to which the inflammation may be due. All the factors which most dermatologists are wont to regard as etiological, such as gout, rheumatism, digestive derangements, and nervous exhaustion, are for him merely conditions which perhaps render the soil more suitable for the development of the germ. This, however, is a large claim, which few dermatologists will accept either as probable or in accordance with all the clinical facts, and might be put forward on almost similar grounds for nearly every form of dermatitis. That micro-organisms exist in large numbers on the normal skin has been proved by UFFREDUZZI and others, but they are innocuous to sound skin even in people who are most sparing in their ablutions. That micro-organisms exist in great variety and number in scales, crusts, and other inflammatory products, and that some of them at least exercise an injurious influence, we know to be the case—with pus cocci, for instance,—and it is probable that they are responsible for many secondary consequences of inflammation of the skin, and also possibly for keeping up an inflammation that would otherwise subside. To assume that they come in before dermatitis has opened the door, so to speak, and that they should often excite a very widespread inflammation in a few hours, with a symmetrical distribution in definite vascular area and occasionally even along the course of a nerve, appears to us to be mistaking effect for cause, and calculated to hinder rather than promote the advance of the pathology of the skin. The theory of secondary infection by micro-organisms of inflamed surfaces seems to be more in accord with clinical facts and to be capable of yielding important practical indications for antiseptic treatment, while it does not discourage intelligent efforts by the physician to render the patient's organism less prone to inflammatory changes on slight provocation, whether that inflammation be in internal organs, mucous membranes, or skin. Highly important as the germ theory is, it will be a retrograde step in pathology and therapeutics if, ignoring the rich vascular and nervous connexions of the skin, we treat it as if it were independent of all it encloses, and simply sterilise it instead of trying also to act upon it by intelligent treatment of the rest of the organism, as we do in diseases of other parts of the body.

THE Return to an address of the House of Commons, of memorials and communications received from the principal medical licensing corporations of Great Britain and Ireland, urging the Government to adopt the recommendations of Lord CAMPERDOWN'S Committee on the Army Medical Department, is a document of grave importance. These memorials bring clearly to the notice of the Secretary of State for War the grievances of the Army Medical Officers and the injustice done to them by his refusal to give effect to the recommendations made by Lord CAMPERDOWN'S Committee. The papers included in the return may be grouped under three heads. First, those emanating from the principal medical licensing bodies, under which are included the Royal Colleges of Physicians of London, Edinburgh, and Ireland; Trinity College, Dublin; the Royal Colleges of Surgeons of London, Edinburgh, and Ireland; and the Faculty of Physicians and Surgeons of Glasgow. Secondly, the memorial of the Parliamentary Bills' Committee of the British Medical Association and that of the Dublin branch. Thirdly, memorials from the students of nineteen different medical schools, three in Ireland, four in Scotland, and twelve in England, whose signatures amount to a total of 1546. The first of these groups ought to carry very great weight with the War Minister in the consideration of this important question. It represents the opinions of men of the very highest standing in the profession, and who, from their position, must exercise a very powerful influence in determining the class of men who will come forward to supply the wants of the army, if, indeed, they will enter it at all. And what is the opinion expressed in their memorials, all of which bear evidence of careful consideration? It is unanimous that just causes of dissatisfaction exist in regard to the rank and position of the medical officers, and, with the exception of the Royal College of Surgeons of Edinburgh, that the recommendations of Lord CAMPERDOWN'S Committee, if carried out, would remove the general feeling of discontent which now unfortunately prevails in the Department. The Edinburgh College recommends "the granting of relative rank, in accordance with the date of each officer's commission, which they understand is already admitted, and restricting their duties to those of a professional nature only." From a careful consideration of the circumstances which have led to the present very unsatisfactory condition of affairs, and to the nature of the duties which devolve on medical officers on service, we conclude that this course would be inadequate to the removal of the grievances. The second class of documents, those emanating from the British Medical Association and its branches, fully support the views expressed by the various colleges, and urgently request that the recommendations of Lord CAMPERDOWN'S Committee be granted. The third group, though probably obtained under some pressure, possess a certain value by showing to what extent the class may be influenced by external agency,

which might have an important bearing upon the supply of candidates willing to offer themselves for the service.

Mr. STANHOPE has a very difficult task to perform, considering the hostile attitude of his military advisers to the claims of the medical officers, but we sincerely trust that he may have sufficient moral courage to carry out measures essential to the interest of the army. The medical service has been brought to a state of efficiency which has never been surpassed; it is now stated by those most competent to form an opinion that an important change is necessary to secure a supply of well-educated gentlemen as candidates for the service, and that if nothing is done to redress the acknowledged grievances of the medical officers, there will be an unavoidable difficulty in supplying vacancies, and the diminished supply will undoubtedly be of an inferior quality. We can hardly believe that Mr. STANHOPE, by a persistent refusal to adopt the recommendations of his own committee, will adopt a course which must prove injurious to our soldiers and fatal to his own reputation as the responsible head of our military service.

Annotations.

"Ne quid nimis."

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

WE understand that the Council of the College of Surgeons has appointed a committee of ten members, including the President and Vice-President, to receive a deputation from the Association of Fellows. This is the outcome of the resolutions which were passed at the general meeting of the Association of Fellows, held on June 14th, and reported in THE LANCET of June 21st. The points which the deputation will press upon the attention of the Council concern the interests of the Fellows of the College exclusively, and are three in number: 1. It is sought to obtain for the Fellows the privilege of meeting within the walls of the College, and of being convened separately from the Members at least twice a year to consider and deliberate upon the affairs of the College. 2. As the present method of distributing voting papers for the election of members of the Council has proved to be cumbersome, inconvenient, and to have the effect of virtually disfranchising a considerable number of the Fellows, the Council will be asked to issue them to all the Fellows, with the names of the candidates for the vacant seats. It is estimated that this change would increase the number of Fellows voting at the annual election by as much as one-third. 3. The Council will be urged to take the sense of the Fellows of the College before concluding any arrangement with the University of London. The Association is in no wise discouraged by the results of the elections of 1889 and 1890, which were mainly governed by the opposition to the movement for giving the Members of the College a voice in its management and the election of the Council. When the real aims and objects of the Association are better understood by the constituency, the Association expects to gain a great accession of strength, and the strength which it at present possesses will be more effectually exerted by an improved organisation. We are informed that it is intended to institute provincial branches of the Association and to hold an annual dinner. A social gathering would do much to harmonise discordant elements, to remove misconceptions, and create an *esprit de corps* among the Fellows of the College.

"THE LANCET" CHLOROFORM INQUIRY.

WE are constantly compelled to record deaths occurring under chloroform, and are generally impressed by the fact that the reports furnished are not sufficiently complete. A very natural feeling prompts reticence as regards the lay press, but when the immense importance of the matters at issue are considered, there can be no room for hesitancy about furnishing the fullest reports to the professional journals. We some months ago, in connexion with the inquiry conducted by the Hyderabad Commission, issued a circular to the profession individually, and a further circular of inquiry was sent to all the hospitals and dispensaries requesting an account of personal experience of deaths under anæsthetics, and yet but comparatively few out of the great number questioned have found leisure to answer our appeal. It is admitted upon all hands that mere experimentation upon the lower animals is, without clinical experience of the behaviour of human beings under anæsthetics, inconclusive; and this is further shown by the fact that different observers arrive at different conclusions. We would, then, earnestly beg of our readers to furnish us with their own experience, and see that those responsible for the record of cases in the hospitals to which they belong duly fill in and return to us the inquiry form sent out. If this has been mislaid, we will gladly furnish fresh forms. The constant tale of deaths which are so lamentable surely claims of the profession some personal effort towards establishing a satisfactory clinical record of the behaviour of human beings under anæsthetics, and, it may be, throwing light upon the best way to avoid fatalities.

AN IMPORTANT SOCIAL QUESTION.

LITTLE by little the importance of prudential considerations in connexion with marriage and the multiplication of the race is making an impression upon the public mind, and from time to time one meets with utterances which afford ground for hope that the time is not far distant when public opinion will brand with merited infamy the offence of launching upon society children for whom no proper place can be found by those who are primarily responsible both for their being and wellbeing. As yet, however, the subject does not seem to be very well understood, even by those who discourse of it most copiously. On one or two points, indeed, it may be confidently said that theory is unmistakably plain. It is, for instance, the clear right, and therefore the plain duty, of the community to take steps to prevent the habitually criminal and the helplessly pauper classes from multiplying by reproduction. Practical difficulties no doubt stand in the way of giving effect to the principle, but no one can doubt that the principle is sound, and sooner or later the practical difficulties will assuredly be surmounted. But when analogous restrictions are pointed to as a remedy for blameless poverty the case is by no means so clear. Mr. Arnold White, for instance, writing to *The Times*, advocates the adoption of some very stringent bars to marriage, including a raising of the present legal limit of age at which consent can be given, and the requirement in the case of male minors of reasonable evidence of ability to maintain a family. We greatly fear that if in these matters Mr. Arnold White could have his way he would find that he had only promoted a futile piece of legislation. A mere glance at the statistics of marriage is sufficient to show that the number of marriages celebrated between minors under his limit of eighteen and sixteen years of age is quite inconsiderable, and it does not at all appear how he proposes to provide against the increase of illicit unions

which any merely statutory bar to the legal marriage of persons who are at liberty and under their own control is sure to occasion. Those whom the community have under lock and key it can no doubt place under any reasonable or even unreasonable disqualifications in respect of marriage; but if persons who are free to meet are prohibited from uniting if they so desire, the chief outcome of such a prohibition would doubtless be the formation of illicit unions with all their attendant risks and misery. The question is one which merits the closest attention, but it must not be supposed that the solution of this difficult and delicate problem is yet to be had for the mere asking.

MASSAGE IN FRACTURES.

DR. CRICKX of Brussels, in a paper just published in *La Clinique*, expresses himself strongly in favour, in certain cases, of the treatment of fractures by massage instead of by plaster-of-Paris bandages. Although massage has been practised successfully in such fractures as those of the humerus and tibia, it is not for such that Dr. Crickx recommends it. In his opinion it is especially suitable for fractures of the fibula and radius. He commences by effleurage with centripetal movements, avoiding for the first few days the seat of the fracture itself. An increase of pain sometimes occurs, but should not alarm the surgeon or induce him to desist from the treatment. After a short time the movements are increased in force. After about ten days pétrissage of the muscles may be commenced. All this time the limb is kept without a splint, or simply laid in a hollow back splint of pasteboard. The massage is continued until the cure is complete. In addition to the cases mentioned above, massage may be usefully adopted in fractures of the patella, olecranon, and of processes such as the epi-trochlear and the styloid. Dr. Lebrun, writing in the same paper, gives notes of several cases of fracture in which massage was employed by himself or by his house-surgeon with considerable success. In one of these, where a man had missed his footing in attempting to get on a tram, and had sustained a fracture of the fibula together with a sprain and effusion of blood under the skin, the leg was first put up in a starch bandage, but was so painful that after a few hours this was taken off, and massage practised, which afforded immense relief.

AN OVER-SENSITIVE JURY.

IT is well that the despatch of public business is not usually impeded by such obstruction and annoyance as characterised the proceedings at a recent inquest at Kingston Hill. A lady having died suddenly from suffocation due to syncope while taking a bath, the customary legal inquiry became necessary, and the coroner, taking into consideration the difficulties often attending examinations of the body, ordered its removal to the mortuary. To this course the husband of the deceased objected strongly, and the jury, one of whom was a friend of the family, supported his objection. So far did their sympathies carry them that they even proposed to defer the verdict until this entirely secondary matter had been settled to their satisfaction. This the coroner very properly refused to allow, and the inquest was duly closed, though not until so much time had elapsed that another case had to be postponed for later consideration. To those most immediately interested, a coroner's inquest is doubtless very far from agreeable or convenient. No arrangements will ever make it popular, but if any one thing more than another is likely to minimise its disadvantages, it is the avoidance of all needless and useless opposition. The case before us was clearly one in which the law allows no alternative but investigation, however natural the cause of death might appear to be. The home circumstances of the deceased were evidently such as to justify the coroner's decision to have the body removed for examination. We freely admit that there does not exist in all cases of sudden and unexplained death an equal moral necessity for judicial inquiry, but we cannot blame the coroner if in any particular case he employs every reasonable means in order to arrive at an accurate verdict. We admit also that in many less obscure cases where the evidence of natural death is indubitable the ends of justice and the general convenience would both be served by limiting the inquiry to a mere acceptance of sworn statements. The usage of most coroners in such cases amounts to this, but some further simplification in the ordinary process is admissible. As to the removal of bodies where a post-mortem examination is called for, this is usually by far the most convenient method. It allows greater facility in examination, it saves the time of jurymen, who must otherwise travel to and from the house where death occurred, and it avoids the cost of their conveyance, which must fall upon the relatives. Finally, the objection to this course being mainly or wholly sentimental would be readily waived by most reasonable persons. In the case quoted it appears to us that the sentimental argument has been admitted in the press with more freedom than sound judgment or knowledge of the subject.

A SAVAGE CUSTOM IN DRESS.

EVEN amongst women themselves opinions differ as to the advantage or otherwise of wearing in the hair a so-called ornamental comb. Some artificial means of fixation is perhaps essential to neatness in arrangement, and this may very well be safely and becomingly contrived. As for the comb, however, and the various forms of skewer which one daily meets with transfixing a hat or passed at random through some head-knot or plait, these are mere extravagances of costume. Fashion acknowledges them as it does other vagaries; simplicity, the essence of true taste, ignores them. Utility condemns them as idle. Harmless they may be in themselves, yet they have before now imperilled or injured the persons of their wearers. Take, if even as an extreme instance, the case of a woman who fell downstairs a few days ago and was so seriously injured by the teeth of her haircomb, which penetrated and broke in her skull, that death resulted. Here, no doubt, allowance must be made for the fall, but the chief injury incurred cannot be attributed to this. "Let us not be over-cautious; there is danger in every moment we live and step we take, if only we will seek it out." True; but why carry about even a chance of risk for the sake of dubious taste and slavish fashion?

TYPHOID FEVER AT SANDHURST.

BETWEEN Wellington College on the north and the Royal Military College on the south, with the Blackwater river to the west and Broadmoor Lunatic Asylum in the east, is a valley of the Bagshot Sands district known as Owlsmoor. Here, during the past few weeks, ten cases of typhoid fever have developed among the people who are mainly dependent on the above-named Government institutions. Though every precaution may be taken to avert the spread of the disease to the inmates of these institutions, the presence of typhoid fever in the insanitary valley through which the Blackwater river runs, and into which much of the overflow of the sewage of this increasing district flows, cannot but be fraught with danger to the whole neighbourhood. These Government institutions draw their water-supply from a local source, and there must be danger of pollution unless the greatest precautions are taken, and even then the whole of the risk cannot be abolished. We have so often directed attention to the in-

sanitary condition of the Sandhurst district, and quite recently to the state of the valley of the Blackwater, and the occurrence of diphtheria there, that the outbreak of typhoid fever cannot be a matter of surprise to any of our readers. The time has arrived at which nothing but an impartial Government inquiry into the source both of the constantly recurring diphtheria and the present outbreak of typhoid fever can give confidence to the numerous parents whose sons are at either the Royal Military College or at Wellington College, for constant intercommunication between these institutions and the inhabitants adjacent to them and the infected district must be attended with considerable risk. Nor is this the only risk, for the polluted Blackwater river, ultimately emptying into the Loddon, and then into the Thames, may become the source of mischief to many persons whose residences are in the line of these streams. This outbreak of typhoid fever may, we hope, be the means of directing attention to this very insanitary area and the dangers beyond it.

THE ROMAN CONGRESS OF INTERNAL MEDICINE.

ON Monday, the 20th inst., this Congress, the third in the series, opened its sittings with an address, able as to matter and classical as to form, by the President, Dr. Guido Baccelli, after which came the elaborate report by Professors Luzzatto and Patella on the Etiology and Cure of the Various Forms of Pleurisy. An interesting and prolonged discussion ensued, in which the leading members of the Congress, representing the chief medical schools in Italy, took part. To this we shall take another opportunity of referring in detail. Meanwhile, our Italian brethren are to be congratulated on the progressive interest awakened by their medical congresses, of which this, the latest, promises to be not the least prolific in sound contributions to science and practice.

SEWER GRATINGS.

WE print a letter this week which suggests that the effluvia given off from sewer gratings may be one cause of the present prevalance of diphtheria. This is quite conceivable, and no one will doubt that to live in an atmosphere vitiated with sewer air must act as a predisposing cause, at least, of many forms of ill-health, diphtheria included. That the gases bred of putrefactive processes in sewers must be allowed some means of escape other than into our houses no one doubts; but while some advocate putting the vent-holes at the street level, others advise the use of ventilating chimneys which shall conduct the effluvia above the roofs of the houses.

The sewer grating, be it remembered,

> "like the toad, ugly and venomous,
> Wears yet a precious jewel in his head,"

by which we mean that the stench arising from a sewer when rightly considered has its uses, for it ought to make us instantly take measures to remove the cause of offence by flushing, disinfection, or other means. Sewage is so offensive to the eye that we have put it out of sight, and by so doing we deprive ourselves of the protection of one of our senses. If we take measures which will prevent our smelling it, we deprive ourselves of the protection of another of our senses. It must not be forgotten that by the use of high ventilating shafts we do nothing to stop the putrefactive process which is the cause of the mischief. The gases which result from putrefactive processes are not probably very dangerous to health, and those delivered at the roof level would be diluted beyond recognition before they struck the nose of a passenger in the street, although it might be otherwise with the denizens of the attics. There can be no question that offensive gas gives less annoyance to the nose when given off by a high chimney than when discharged in a confined space flanked by houses. As regards the infective microbes which, infinitely small though they be, are distinctly ponderable, it is at least conceivable that those having to fall to earth through sixty or eighty feet would stand a better chance of being inhaled or swallowed than when delivered at the street level. On a sultry July day there comes a heavy downpour, and the torrent flowing to the sewer causes a copious escape of gas from the high ventilators. Infective microbes accompanying the gases are washed down by the rain, and in falling past the windows of five or six storeys, and so to the ground, have a better chance of being inhaled than when they are battered to earth again as soon as they emerge from the street grating. We have learnt by experience how infective particles escaping from the small-pox hospitals drift about to the neighbouring houses, and we must admit that the same kind of thing might happen in the case of infective particles given off from the high ventilating shafts. In short, high ventilating shafts will remove the evil from our noses. They will prevent the concentration of gas or microbes in the bottom of close streets, and will insure a more perfect distribution of them over our heads. Some may be destroyed by oxidation, but it would be rash to count upon this in a great city where ozone is seldom present, and our experience with small-pox does not favour such a theory. To pass the sewer air through fire or flame would destroy poisonous and infective matter, but would foul the air with the products of combustion, of which we have already more than enough. These methods of treatment, be it observed, do nothing to remove the cause of the evil, but by preventing our ready recognition of it may possibly allow the evil in the sewer to attain larger dimensions than otherwise would be the case. Every inspector of nuisances ought to have two noses, one to give that dignity and self-importance to the countenance which inspectors ought to have, and another to sniff the gratings and gutters; and he ought to descend into the sewer whenever offensive smells issue from it and personally investigate the cause, and, if possible, remove it, or, if that be impossible, report to his authority which is responsible for the nuisance. But the public must not expect impossibilities in this matter. When modest houses are pulled down and palaces of much greater cubic capacity are erected this means an increase in the work thrown upon the sewer. Monster hotels and "mansions" in the sky must send a prodigious amount of putrescible matter to the sewer, and it is not to be wondered at if sewer nuisances increase in a city where nothing is regarded by the inhabitants except immediate profit, and building and the concentration of dwellings are absolutely uncontrolled.

MYXŒDEMA AND ENDEMIC CRETINISM.

IT is well known that there is a very striking resemblance in these two conditions; some authors have stated that the only difference between the two is that one is a disease of adult life and the other is congenital. Bircher contributes an interesting communication on this subject in the *Sammlung Klinischer Vorträge*, No. 357. He describes the recognised symptoms of myxœdema, and also the morbid anatomy as far as it is known. The secondary symptoms of the disease—hypertrophy of the left ventricle, paleness of the skin, feeble pulse, œdema, and serous effusions—he thinks may be ascribed to endarteritis, nephritis, and hepatitis, and their results. The primary symptoms—changes in the skin, mucous membranes, and functions of the nervous system—he considers depend upon disturbances of nutrition in the brain. The blood is watery,

the number of red blood-corpuscles diminished, and there is an increase of mucin in the tissues. These changes are due to atrophy of the thyroid. In support of this theory, Bircher states that after complete removal of that gland changes are produced which exactly resemble those in myxœdema. This artificial myxœdema is more acute and runs a shorter course than the true disease. He considers that the thyroid is an organ necessary to life, probably because it prevents the accumulation of mucin in the body, and other organs are not able to take up its function. These observations are confirmed by experiments on animals. Thus, dogs died after total extirpation of the organ; but if a small piece of the thyroid was transplanted by being introduced into the peritoneal cavity, the animals rapidly recovered. Bircher then relates the history of five women who had goitre, and in whom total extirpation of the thyroid had been performed. In three of these slight symptoms of myxœdema showed themselves, and then disappeared; in all these small portions of the thyroid were observed to have been left in position. The fourth patient died of epileptic attacks; her ovaries had been removed two months previously. The fifth patient rapidly developed epileptic attacks. A small piece of a thyroid was then introduced into the peritoneal cavity, when all the symptoms at once improved. Bircher goes so far as to suggest this operation for the treatment of myxœdema. Endemic cretinism Bircher considers to be an infectious disease, the infective material being carried by drinking-water. The most important and constant symptom is the enlargement of the thyroid. The author then fully describes the history, symptoms, pathology, &c., of cretinism, and especially dwells on the differences between this disease and myxœdema, and finally sums up thus:—"1. Myxœdema is a sporadic disease. It is due to the loss of function or atrophy of the thyroid; it is a general dyscrasia, occurring chiefly in adults. 2. Cretinism is an endemic complaint. It is due to an infection which is long continued, children being most susceptible. In addition to the hypertrophy of the thyroid, irreparable malformations occur in various parts of the body."

DEATH REGISTRATION AT POST OFFICES.

A CORRESPONDENT of the *Manchester City News* has recently made a vigorous attempt to discredit the value of the Manchester death-rate as a test of the sanitary condition of the city. He asserts, among other things, that the last census in Manchester was so defective that whole streets were omitted from computation, and that the deaths of one or two millions of population are recorded in Manchester and debited to a resident population of only a fourth of that number. Such groundless assertions may to some extent serve the mischievous purpose of weakening the hands of those in Manchester who are struggling to promote real sanitary progress in the city, but do not call for serious attention from those well-informed as to the true value of our national system of mortality statistics. It is only necessary to point to the crude suggestion that death-rates in towns should be calculated upon their day population, instead of upon their resident population, to prove how little thought and knowledge of the subject this writer has brought to bear upon the matter on which he expresses such dogmatic opinions. We would, however, refer briefly to a suggestion which he puts forward as a means for saving "something like £80,000 per annum," in addition to "the gain in the saving of the public time and temper." The suggestion is that the registration of births and of deaths should be made possible at all post offices. Looked at only from the point of view of the public duty of registering births and deaths, there would be an obvious convenience in being able to walk into the nearest post office to perform this legal obligation. It is not quite so clear, however, how the large saving of expense is to be arranged, unless it is proposed that the post-master is to undertake this new duty without extra remuneration. There are, however, two very important considerations bearing on this suggestion, which probably have not engaged the attention of the writer. 1. What precautions could be taken to avoid the false registration of deaths for insurance purposes, as by such a system it would appear impossible to restrict the right of registration to immediately local post offices? 2. Are we prepared to adopt a system of death registration which would be a death-blow to local mortality statistics unless the registration at the post office were a mere preliminary to a subsequent record in a local register? Probably, however, from the tenour of the article in question, one of the main objects in view is to render the calculation of a local death-rate for Manchester impossible.

RAILWAY BRAKES.

IT is satisfactory to gather from a return just published by the Board of Trade that the use of efficient brakes by the railways of the United Kingdom continues to make progress, and that a very marked improvement has taken place during the past year in this respect. The work of replacing old and ineffective apparatus with improved forms must necessarily occupy time, and we are not much disposed to quarrel, on the whole, with the rate of progress made. It is, however, a little surprising to find that a railway running out of London, and carrying an exceptionally large proportion of passenger traffic, should be conspicuous among the railways which use one of the less satisfactory forms of brake. The proportion of fully equipped stock is now returned at 83 per cent. of engines, and 81 per cent. of carriages &c., while a further number, amounting to 13 per cent. and 15 per cent. respectively, are provided with brakes which fulfil some of the requirements of the Board of Trade. The residuum of 4 per cent. of unfurnished stock should shortly disappear from the return, and we hope that the same industry which has been manifested in recent years in replacing imperfect forms of brake will continue to be exhibited by the railway companies. In that case a very few years hence will see the transformation complete, and every railway passenger in the British isles enjoying the valuable guarantee of security which an automatic and continuously acting brake can alone afford.

NATIONAL LEPROSY FUND.

THE members of the Leprosy Commission despatched to India by the committee of the National Leprosy Fund sailed on Thursday last for Bombay. They comprise: Dr. Beaven N. Rake of Trinidad, nominated by the Royal College of Physicians; Mr. A. A. Kanthack, M.B., B.Sc., F.R.C.S., nominated by the Royal College of Surgeons; and Dr. G. A. Buckmaster, nominated by the Committee of the Fund. On their arrival in India these gentlemen will be joined by Surgeon-Major A. Barclay (Secretary to the Surgeon-General to the Government of India) and Surgeon-Major S. J. Thompson (Deputy Sanitary Commissioner of the Second Circle in the North-West Provinces and Oudh), who have been deputed by the Viceroy of India to assist in the inquiry. The special committee, which was empowered to draw up instructions for the Commissioners, comprised Mr. Jonathan Hutchinson, Sir Dyce Duckworth, Dr. G. A. Heron, Mr. C. Macnamara, the Hon. G. Curzon, M.P., Mr. Edward Clifford, and Mr. Claude Johnson. The Commissioners, after a stay of about one year in India, will within six months of their return to England send to the committee a full and detailed report, especially in view of the question of the isolation and treat-

ment of lepers. The National Leprosy Fund Committee will also, as soon as funds permit, endow two studentships—one student to make the United Kingdom and the remainder of Europe his field of investigation, and the other to go abroad and study the disease in China, the colonies, and elsewhere.

JUVENILE FIRST OFFENDERS.

THE Home Secretary has issued a circular to justices on the subject of the commitment of juvenile first offenders to reformatories, which will, we hope, have a salutary effect upon the practice of provincial magistrates in dealing with this important class of cases. The triviality of the offences dealt with on such occasions is apt to obscure the importance of the consequences which attend upon their judicial treatment. The moral atmosphere of a reformatory school is, unhappily, such as may seriously injure the character of a comparatively innocent child, and we, for our part, fully share the regret which Mr. Matthews expressed that nearly half of the total annual commitments to reformatories are on a first conviction. In London it is customary to make inquiries into the antecedents of every young delinquent before committing him to the reformatory, and the general adoption of such a practice ought to follow at once upon the Home Office suggestion. A schedule of particulars which is suggested for adoption comprises, we are glad to observe, a well-considered series of details concerning the child's health and physical condition. It is at the present time pretty generally understood that the punishment of crime ought to be a remedial as well as a repressive agency, and if, in any circumstances, the remedial character may be hopefully expected to develop, it is in those which surround the juvenile offender convicted for the first time.

LIFE ASSURANCE AND THE MEDICAL PROFESSION.

WE are daily receiving replies to the inquiries on this topic which we addressed to our readers in our last impression, and have been furnished with a large body of valuable information and suggestions by numerons correspondents. The promptitude with which these replies have been sent in has enabled us to push our preparations for the special number of THE LANCET to an advanced stage; but, as the value of the ultimate result will in a large measure depend upon our succeeding in dealing with the subject in a fully comprehensive manner, we trust that any of our readers who may have suggestions to put forward, and have not already communicated with us, will take an early opportunity of doing so.

GEYSER BATHS.

MUCH has been said of the advantages and disadvantages of the use in the bath-room of the geyser as a means of procuring a warm bath with expedition and comparative ease, and every now and then cases of death are recorded which are alleged to be in some way connected with the use of this apparatus. An inquest has recently been held concerning the death of a young man, nineteen years of age, who was found dead in the bath-room. He had always enjoyed good health, and had returned to his home for a few days' holiday. On Monday he had been out and returned at half-past five, when he went to the bath-room. The family sat down to dinner at 6.30 P.M., and as he did not appear as usual, the door of the bath-room was burst open, and he was found lying face downwards, with his legs drawn up, at the bottom of the bath. This bath-room was fitted with a geyser, which had been lit on this occasion. At the inquest, however, Mr. George Cohen pointed out that the room was very badly ventilated, and another witness stated that "the room was stiflingly hot, the walls were wet with moisture, and the ceiling was black with carbon deposit." This picture of a bath-room is unfortunately not a rare one, and it is just such deplorable occurrences as this that will cause the public to set about clearing away the miserable sepulchres which abound throughout the country under the name of bath-rooms, and to construct rooms for the performance of their daily ablutions in harmony with the importance and necessity of bodily cleanliness.

THE HARVEIAN DINNER.

THE annual dinner of the Fellows of the Royal College of Physicians took place in the College on St. Luke's Day, when about eighty of the Fellows and their guests assembled. The President (Sir Andrew Clark, Bart.) was supported by the Lord Chancellor and the Bishop of Peterborough, Admiral Sir Edward Inglefield, K.C.B.; Prof. Grainger Stewart, President of the Royal College of Physicians of Edinburgh; the remaining guests including Mr. John Marshall, President of the General Medical Council; Mr. H. G. Croly, President of the Royal College of Surgeons of Ireland; Prof. W. H. Flower, C.B.; Sir James Paget, Bart., Vice-Chancellor of the University of London; Mr. T. Bryant, President of the Royal College of Surgeons; Mr. J. N. Dick, C.B., Director-General, Navy Medical Department; Dr. Wade, President of the British Medical Association; and the Rev. W. Page Roberts. As may be expected, the oratory of the evening was of a high order, and the gathering was in all respects a great success. During the evening the President read a congratulatory telegram sent from a similar gathering of the Fellows of the Royal College of Physicians in Ireland, in reply to greetings sent earlier in the evening.

CHOLERA INTELLIGENCE.

THE most recent statistical information as to cholera in Spain deals with the first fortnight of the present month, when 486 cases and 259 deaths occurred in the provinces of Valencia, Albacete, Castellon, Cuenca, Tarragona, and Toledo, the total number of cases and deaths now having reached 5336 and 2775 respectively. Valencia is still suffering most severely, some five or six cholera deaths taking place daily, but on the whole the epidemic is distinctly on the decline in Spain. From Jeddah we also learn that cholera is practically at an end on the Red Sea, the first ship sailing from that port with a clean bill of health having left on the 20th inst. On the other hand, the disease is maintained in Asia Minor. Indeed, at Aleppo, the daily fatality is very considerable; the whole *vilayet* is said to be infected, and the disease is spreading in the direction of Damascus. The extension of cholera to both Damascus and Beyrout is also feared by reason of the traffic along the trade routes of the Tigris.

THE MUTUAL SERVICES OF MEDICAL MEN.

AT Dover County Court last week, Mr. Long, surgeon, of Dover, sued Dr. Chittenden, retired medical practitioner, for £21, for professional attendance. The case, a report of which will be found in another column, arose in the High Court, and had been sent down for trial by Judge Selfe. The defendant contended that it was the custom in the medical profession for one member not to charge another for attendance. He also said that from words used by Mr. Long he assumed that an arrangement had been come to by which they would attend and help each other. On the question of custom, it was stated by the plaintiff and

another medical gentleman that, although it was not usual to charge a man in practice, it was usual to charge a retired medical man. With this the judge agreed. He referred to remarks on the case in THE LANCET, and observed that, though THE LANCET was a most important authority on the etiquette of the medical profession, it was not a guide to the Court, and gave judgment for plaintiff, with costs. We do not think that this case shows very much. Medical men are glad to advise each other in regard to themselves or their immediate families. And such offices are among the pleasantest in medical life. It would be unfortunate if the general custom were to be violated or altered by any judicial decision. But two things should be remembered. Firstly, the custom is custom, not law; and secondly, the custom, though admirable in itself, is nevertheless one which is capable of abuse. It seems to us not so much a question of retirement as of reasonableness. A retired medical man may be under some circumstances a most fit object for all helpful consideration. It would seem that Mr. Long was moved by some reasons which he considered sufficient justification for certainly an unusual course.

APPOINTMENT OF A PUBLIC VACCINATOR.

CONSIDERABLE discussion is going on in the Doncaster Union as to the election of a successor to the public vaccinator for one of the districts, who has been required to send in his resignation. The inhabitants of one of the localities involved have petitioned the guardians to elect a medical practitioner in whom they place much trust; but the guardians have selected the assistant of their former officer, whose services they had been desirous of retaining. The petitioners have decided to appeal to the Local Government Board, partly on the ground that the vaccination will practically remain in the practice of an official whose resignation that Board had required. But if the assistant be a properly qualified medical practitioner, holding the proper certificate of proficiency, and residing in the district, we hardly see that the Local Government Board can well object—unless, indeed, they find, as a matter of subsequent experience, that the duties are not performed by the actual officer elected.

LORD DERBY ON AMATEUR SURGERY.

LORD DERBY has been speaking at the annual meeting of the St. John Ambulance Association, and, as usual, his remarks were characterised by strength and common sense. He fully admitted the use of ambulance teaching in saving life, and still oftener in saving suffering, but he administered an admirable caution to those who receive it. They are apt to imagine that in a few lectures they are made partakers of the whole art and mystery of surgery, and that they can supersede the educated surgeon. This is the danger of the proverbial "little knowledge." If Lord Derby's words are heeded, this tendency will be checked. His lordship said: "The object of the Association, as you know, is mainly to give to persons injured or suffering from sudden illness such help as is required on the spot until the services of the physician or the surgeon be available. I lay some stress on this condition, because I am told there are some people who have taken up the notion that we want to teach unprofessional persons to undertake the duties of professionals. That is absolutely a mistake, and if there were any foundation for that belief you would not see me here. I have very few stronger convictions than that of the worthlessness of amateur work, and of the folly of a man undertaking a part for which he has not carefully trained himself. We know what is popularly said of the client who is his own lawyer; and a copious supply of non-medical men doing medical work—of amateurs confident in their inexperience—could have no practical result except one: it might considerably tend to reduce our surplus population. The object we have in view is not to rival the medical attendant, still less to displace or supersede him, but in cases of injury or sudden illness to save those precious hours which are often lost, and the loss of which is often fatal, before the doctor can attend, and during which time inexperienced friends either do nothing at all, from a reasonable apprehension of doing mischief, or else they do mischief from an unreasonable but natural dislike to be doing nothing." It is no doubt lamentable to think how easily life is lost sometimes for want of a "little knowledge." Lord Derby instanced the many such deaths from drowning, and one case in which the life of a working man who had wounded an artery with a tool was saved by a neighbour, who stopped the flow of blood; another not uncommon case is the rupture of a varicose vein. Life is lost for want of the simplest knowledge in the patient or those about him. By all means let such knowledge be imparted. The medical profession has shown its readiness to lend its aid in the work. But let Lord Derby's caution be remembered. One word we must add. Surgery is perhaps receiving an undue amount of attention. For one life lost by ignorance of the plainest facts of surgery, hundreds are sacrificed from ignorance of the plainest facts of sanitation, and yet this subject is rarely taught in popular classes.

THE PORT OF LONDON.

THE account which Dr. Collingridge is able to give as to the sanitary administration of the Port of London during the first half-year of 1890 is extremely satisfactory, especially in so far as it shows how excellently the measures for the promotion of wholesomeness and the protection of the public against infection continue to work. Of 7532 vessels which were visited, 347, or 4·5 per cent. of the total, required some cleansing or other operations. The admirable isolation hospital which has been erected on land adjoining the river again served its purposes usefully, but, there being no separate accommodation for small-pox cases, Dr. Collingridge naturally views with apprehension the results of attempting to isolate any case of such disease under the same roof as patients suffering from a different infection. Indeed, it would probably be the reverse of "isolation" in the case of the latter; and it seems a pity that a body which otherwise sets an example in the way of port sanitary administration should not be prepared, in advance, to face an emergency with which they may obviously have to deal at any moment. Referring to the state of the Thames in so far as it is affected by the metropolitan sewage outfalls, it is stated in the report that although precipitation works are still being constructed at a heavy cost, that practice as hitherto carried out has been a complete failure, the precipitation and deodorisation not having had the slightest effect. Indeed, any change for the better which has been apparent seems to have followed on and to have been brought about by the low temperature and almost continuous rain which prevailed during the most important portion of the period reported on.

DIPHTHERIA AND THE DISPOSAL OF LONDON REFUSE.

THE recent occurrences of diphtheria in Paddington have sufficed to let loose a flood of correspondence in the daily papers as to offensive smells in nearly all the West-end portions of the metropolis, and to show conclusively that our sanitary authorities have not yet learned how properly to deal with the various forms of refuse that have to be disposed of in some way or other wherever there are aggregations of people. The failure of destructors to do their work without nuisance, the smells from brickworks where

house refuse and cinders are used as fuel, the tips of filth at canal wharves, the carriage of slaughter-house refuse and similar stuff through our streets, together with smells which are rightly or wrongly attributed to sewers, all come in for a share of condemnation, and the universality of the complaints speaks volumes as to the truthfulness of the allegation that there is nuisance, whatever its source. Here is essentially a case in which some centrally organised inquiry is needed. Each parish is more or less concerned in getting rid of its filth at the least possible cost, and each one naturally tries to defend its own methods. But the fact remains that London filth is not utilised in such a way as to avoid nuisance; and, remembering that the nuisance is complained of as mainly occurring at night, it is highly probable that the hours of darkness are selected for procedures which it would be inconvenient to adopt in broad daylight. As to the association of these nuisances with diphtheria, it is difficult to speak with any certainty. There is but little doubt that sore-throat is at times the result of the inhalation of such foul effluvia; sore-throat tends to become infectious; and there are few who would now draw a hard-and-fast line between prevalences of infectious sore-throat and of diphtheria. Organised appeal to the London County Council for inquiry into the whole subject seems to be the most reasonable course to adopt.

AN UNREGISTERED PRACTITIONER AND LUNACY CERTIFICATION.

SOME time since we noticed the case of Dr. Henry Dobson, M.D. Edin., part proprietor of the Craiglands and Troutbeck Hydropathic Establishment at Ilkley, charged with having unlawfully and falsely represented himself as a person registered under the Medical Act on the 9th of August by signing a certificate of insanity for a patient, on which she was consigned to St. Luke's Asylum. The case was tried at the recent Quarter Sessions at Wakefield on the instigation of the Lunacy Commissioners. Dr. Mickley of St. Luke's Hospital testified that the patient was sent to the institution, and that, in consequence of the certificate being signed by an unregistered practitioner, four days' delay in the reception was caused. The facts were not denied, and the Chairman said there could be no doubt that Dr. Dobson had placed himself within the four corners of the Act. The jury, after nearly an hour's consultation, brought in a verdict of "Not guilty," and Dr. Dobson was at once discharged. Practitioners in hydropathic establishments should be registered men; but when to that function they add the signing of lunacy certificates, the obligation to be registered is imperative—this in the interest alike of themselves, of the patients whom they consign to the asylum, of the friends concerned, and of the medical profession. We would earnestly caution our readers not to sign certificates of insanity without being registered. The favourable verdict of a jury is not to be relied on, and in any case it does not alter the law of the case.

THE BIRMINGHAM COMMITTEE: THE EFFICACY OF INQUIRY AT HOSPITALS.

IN the course of some interesting evidence by Mr. Henry Eales, of the Eye Hospital, he said that the surgeons would be more strict, but were not supported by the committee. Up to four years ago the supervision was decidedly lax. He refused to admit a patient making £10 a week, but he was overruled by the committee. He did not convey the idea that supervision now is very effective. About one patient in 300, it is found, was deterred going to the hospital owing to the inquiry. For the last four years the secretary had rejected about one patient a week! Mr. Eales is consulting ophthalmic surgeon to a provident institution. He thought many people went to the Eye Hospital who could afford to pay half-a-guinea, but not one guinea. He thought many patients received spectacles by ticket who could afford to pay for them. He said that in provident dispensaries the surgeons preferred to send patients to hospitals instead of to a consultant. The money is distributed among the medical officers, and a moderate fee should be paid to consultants. Mr. Gilbert Smith, surgeon of the Skin and Lock Hospital, said the number of out-patients had greatly increased in the last twelve months. Patients were charged 1s. each in lock cases and 1s. for two visits in skin cases. Though he said cases of abuse were comparatively few, he added a large proportion, especially of single men, would be able to pay a general practitioner's fee for treatment, and in many cases these practitioners would be able to properly treat them. The last seems rather a condescending remark. Mr. Bull seems to have put a strange question to the witness, to which he replied that he did not think general practitioners prolonged cases of lock disease. Evidence is expected soon from Mr. H. Griffiths, jun., hon. treasurer of the local branch of the Charity Organisation Society, and from Mr. Ravenhill. On the 29th inst. Mr. Lawson Tait has expressed his willingness to give evidence on the Provident Dispensary. It will be interesting to hear what Mr. Tait has to say of this much praised and on the other hand much abused institution. Provident dispensaries certainly have done little as yet to secure to medical men proper remuneration for attendance.

ENTERIC FEVER AT SOUTHEND.

NOTWITHSTANDING partial contradictions as to the precise amount of enteric fever at Southend, it is evident that a serious epidemic of that disease has been prevailing in the place. Such news is very grave for a place like Southend, and this the more so because it is only some ten years since at least 100 people were attacked with the same disease in a very limited portion of the local board district. There were also grave complaints about the sanitary state of the place a few years ago.

THE CONGO CANNIBALS.

MR. HERBERT WARD, one of the surviving members of the rear guard of Mr. Stanley's expedition, and who spent no less than five years in Central Africa (on the banks of the Congo), related some of his experiences in an interesting lecture given at Princes' Hall last Wednesday. The number of illustrations exhibited from drawings and photographs by Mr. Ward served to enable the audience to realise vividly the country and its inhabitants; whilst the personal experiences of the lecturer, related with much modesty and frankness, were much appreciated. Amongst topics of especial interest from a medical point of view were the custom of the ordeal by poison among the Bateke of Stanley Pool, the culprit being selected by the "medicine man," and his acquittal depending upon his survival of the test. The extent to which rum drinking is carried was illustrated by an amusing anecdote in which a native praised the virtues of the spirit as giving pleasure to the partaker of it and profit in the subsequent disposal of the bottle. But, in reply to Mr. Ward's query as to the "next morning's headache," the native admitted that that at least could not be sold. A few details of the "sleeping sickness" were given. This curious affection is invariably fatal, and is characterised by pain in the back of the neck, followed by gradually increasing somnolence. Sometimes whole districts are ravaged by

it. The practice of "cicatrisation"—i.e., the scarring of the face for purposes of adornment—seems to be very common, whilst in some tribes the insertion of a piece of ivory in the upper lip is regarded as equally essential. Mr. Ward also gave particulars of Tippoo Tib and his Arabs engaged in the ivory trade, together with details of the cannibalistic and slave-holding practices of the natives.

CHILDREN'S DISEASES IN ITALY.

AN Italian correspondent writes:—"The Congresso Pediatrico Italiano, which sat at Rome last week, got through a highly interesting programme in very satisfactory style. 'Laryngeal Diphtheritis' was well treated by Dr. Russo from the therapeutic standpoint, and Professor Guelmi of Pavia started an instructive and lively debate on 'Syphilis contracted by Children at the Breast,' with special reference to its prophylaxis. Another contribution of original and practical tenour was that of Prof. Fede of Naples (Lecturer on Children's Diseases in the Neapolitan School) on 'Infective Splenic Anæmia,'—a malady hitherto almost ignored on the Continent, and for the first time described by Dr. Fede,—in its etiology, its clinical history, and its pathological bearings, these latter being illustrated by special bacteriological observations. The reading and discussion of this paper occupied nearly an entire sitting. Of the other contributions may be mentioned one on that very important subject, the 'Use of Natural Waters in Pediatry," in which the wealth of Italy in mineral springs, particularly for the cure of rachitis and anæmia in children, was lucidly set forth by Drs. Boetti, Lelli, and Felici. The proceedings when published in their official form will prove interesting and instructive to more than Italian circles."

NOTIFICATION AND ISOLATION.

DR. SPOTTISWOODE CAMERON some time since made a report to the Sanitary Committee of the Town Council of Leeds as to the needs of that county borough as regards means of isolation, and he gave an account of the proceedings of other sanitary districts, especially in view of the recent adoption by most of them of the system of compulsory notification. He now supplies similar information as to eleven more sanitary districts, each having over 100,000 inhabitants. Only one of these towns—namely, Blackburn—is without a hospital, and arrangements are now in progress for erecting one. From the other towns the information comes that isolation is much on the increase since the adoption of the notification system, and in most of them additional buildings have, in consequence, had to be provided. Leeds and Brighton remain, we believe, the only two large towns of importance in England and Wales where the sanitary authorities have declined to adopt the compulsory notification of infectious diseases; and both of them lack proper hospital accommodation, the need being either for a sufficiency of beds, or for accommodation of such reasonably attractive character as shall lead people to accept the means of isolation offered them in the interests of the public.

LADIES' RIDING HABITS.

THE hunting season is approaching, and many a young lady is full of expectancy at the prospect of a gallop across country with the hounds. The craze about divided skirts and the stride saddle riding for the fairer sex, by the good sense which in the end generally prevails with women, has ceased to be a matter of much concern. Women know quite as well as men that there is no position which exhibits a graceful form to more advantage than a good seat on the side-saddle, draped with a well-cut riding habit. But picturesque as this garment is, it has one grave disadvantage, which arises from the stiff and stout material with which the skirt has to be made. This is a necessity in habit cloth, in order that the garment may not become disarranged in the hurry and scurry of a run. There is a degree of risk in sport, without which it would, in all probability, lose much of its attraction. In order to keep to hounds some falls are inevitable, and the sport is attended with considerable risk of injury to men, but still more to women, and this additional risk arises mainly through the possibility of entanglement between the habit skirt and saddle pommels. Accidents from this cause are of such frequent occurrence, and are liable to be so very grave, that any invention which tends to lessen the risk cannot be otherwise than acceptable. The partially opened skirt, which has been in vogue for some seasons, is an improvement on the old form, although it has some drawbacks. Recently an ingenious invention has been patented, we believe, by a well-known London house, which, while retaining the old form of skirt, is made with a series of fastenings in place of a seam from the waistband to the hem; these, in the event of the habit becoming entangled during a fall, open and let the rider free. It is a small matter for a lady to be left in a ditch minus this portion of her attire, so long as she is otherwise suitably clothed. The relief to her friends to learn that she is free from her horse, which may possibly be seen galloping off with her dangling skirt, more than counterbalances the unpleasantness of her novel situation. There is room, however, for some further improvement, and we cannot help thinking that something may yet be invented to supply the deficiency. The material, though stout and stiff enough to sit well, should be such that it would give when subjected to the weight of the body of the wearer. There would be no difficulty in the temporary repair of the rent, and the lessening of risk to ladies in the hunting field would be very great.

THE "MORGAGNI" AND "LISTER" BAS-RELIEFS AT ROME.

THE *façade* of the Policlinico now advancing to completion at Rome will, as we have already stated, consist of two parts—one representing the medical, the other the surgical, wards of the institution. The former will have as its distinctive ornament a bas-relief in honour of John Baptist Morgagni, the Father of Medical Pathology, and five of the leading sculptors of Italy have sent in their designs for the subject prescribed by the "Commissione Giudicatrice"—the well-known artists Bartolini, Fasce, Pizzichelli, Zocchi, and Ximenes being the competitors. That subject is "Morgagni delivering a lecture in the Pathological Theatre." The decision of the "Commissione" will shortly be announced, and we can only say at present that Ximenes, by his own consent, has been withdrawn from the competition. The bas-relief for the surgical *façade* will represent the "Father of Antiseptic Surgery," also in a characteristic *pose*, and the competing sculptors engaged on it have to send in their designs at an early date. The names of the sculptors and the artistic effects they seek to convey we shall then be enabled to give.

CLINICAL INSTRUCTION IN THE ASYLUM BOARD HOSPITALS.

THE Local Government Board have issued an order making certain conditions as to the use of the Metropolitan Asylum Board hospitals for the purposes of medical instruction. No student is to be admitted to any such hospital unless he has evidence of having received sanction for entering upon the course from his medical school, and he must have completed his third year of study and have held the post either of dresser or clinical clerk. The admission

fee is to be three guineas for the first two months, and one guinea for each subsequent month; no certificate of attendance will be granted except as the result of regular visits and work which will be registered, and all students are, whilst in the hospital premises, to be subject to the control and direction of the medical superintendents.

THE SCARLET FEVER EPIDEMIC.

AT the usual fortnightly meeting of the Metropolitan Asylums Board on Saturday last, the chairman, Sir E. Galsworthy, in intimating the death of their chief clerk, Mr. W. F. Jebb, paid a just tribute to the ability, integrity, and courtesy with which he had invariably discharged his duty during a period of twenty-three years, and moved an address of condolence with his family, which was unanimously adopted. The return of cases of infectious disease notified during the fortnight ended Oct. 11th showed a total of 1775, of which 974 were scarlet fever and 339 diphtheria, being an increase of 131 of the former and a decrease of 11 of the latter compared with the numbers in the preceding fortnight. There was not, however, a corresponding increase in the admissions of fever patients into the hospitals of the Board, the total (505) being a reduction of 27 on the numbers in the preceding return. But on Oct. 16th there were 1856 cases of scarlet fever and 134 of diphtheria in the hospitals, being an increase of 144 in the fortnight. The Gore Farm Hospital was opened on Oct. 14th, and 75 convalescents were transferred to it from the other hospitals. Consequent upon this transfer there were at the date of the return 126 beds available for scarlatinal and 61 for diphtheritic cases, and 104 in reserve, which can be made available when required. We presume this number will be increased by the further transfer of convalescents to the Gore Farm, but the report does not state how many more cases could be received there. In view of the steady increase of the epidemic, as shown by the numbers notified, it was referred to the General Purposes Committee to consider and report as to the necessity of providing additional hospital accommodation.

FOREIGN UNIVERSITY INTELLIGENCE.

Genoa.—Dr. G. Martini has qualified as *privat-docent* in Laryngology.

Prague (*Bohemian University*).—Dr. Mitvalsky has qualified as *privat-docent* in Ophthalmology.

Rouen.—Dr. Delabost, Professor of Surgical Pathology and Operations, is to be appointed Director of the School of Medicine.

St. Petersburg (*Military Medical Academy*).—Professor Bykoff, the Director of the Academy, is about to retire, and his place will probably be filled by Professor Pashutin. Dr. Przibytek has been appointed Extraordinary Professor of Pharmacy and Pharmacognosis, in place of Dr. Lösch, deceased.

Vienna.—Dr. Pick has qualified as *privat-docent* in Medicine.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Alfred Vogel, Professor of the Diseases of Children in the University of Munich.—Dr. Stöhr of Würzburg, Dr. Gustave Monod, Professeur Agrégé of Paris.—Dr. Yakovenko, senior Medical Officer to the Alexandroff Hospital in Kieff.

IN the Senate House of the University of Cambridge the honorary degree of M.A. was, on the 16th inst., conferred on Joseph Griffiths, M.D. Edin., an assistant to the Professor of Surgery and Pathologist to the Hospital at Cambridge.

THE alarming spread of small-pox in Madrid has roused some of the Spanish papers to urge upon the Cortes the passing of a measure to make vaccination compulsory. Indeed in several of the Government offices orders have been issued for all the officials to be immediately vaccinated or revaccinated. Hospitals are being prepared outside Madrid to accommodate patients attacked with variola.

MR. EDMUND OWEN and Mr. NOBLE SMITH have been elected Corresponding Members of the American Orthopædic Association.

WE regret to learn that Professor von Nussbaum of Munich, who has been ill for some time, has lately become much worse.

THE General Medical Council is expected to meet on Tuesday, Nov. 25th.

CHARING-CROSS MEDICAL SCHOOL.

THE annual dinner of the past and present students connected with this hospital and school was held in the Venetian Saloon, Holborn Restaurant, on Friday, the 17th inst., when J. W. Taylor, Esq., F.R.C.S., of Birmingham, a former student of the school, presided. About 150 students sat down to dinner. The Chairman was supported by Dr. Mitchell Bruce and Mr. Bloxam, while Mr. Bellamy, Dr. Green, Dr. J. Watt Black, Mr. John Morgan, and Mr. Stanley Boyd acted as croupiers. In proposing the toast of the "Charing-cross Hospital Medical School," the Chairman alluded to the great progress it had made since the time when he acted as house surgeon there. The change was due to alterations both in the hospital and its surroundings. The medical school had vastly improved, and nearly doubled in size. The new dissecting and anatomical theatre, the pathological, physiological, and chemical laboratories had placed the school in a position second to none in accommodation and in the advantages it offered its students for work. Having spoken in high terms of the generous and untiring zeal of the members of the staff, and alluded feelingly to the death of Dr. Julius Pollock since their last meeting, he went on to state that while they were providing accommodation for the students the school was largely increasing in numbers, and he was informed that whereas the other hospitals in the metropolis showed a falling off or but a small increase in the numbers enrolled this year, the number at Charing-cross for this session was twenty in excess of last year's figures. He asked them to drink the health of Charing-cross and of the Westminster Ophthalmic Hospitals, coupled with the name of his old teacher, Dr. J. Watt Black.

Dr. Watt Black replied in a humorous speech, and a most pleasant evening was spent. The guests were enlivened by songs and instrumental music by Dr. Mott and Messrs. Reade, Abbott, Wigan, Fletcher, and Bayly. Great praise is due to Messrs. Collum and Williams, house surgeons, and to Mr. Bishop, secretary of the Students' Society, for the pains they took in bringing the *réunion* to so successful an issue.

We have had an opportunity of looking over the recent extensions which have been made in the College buildings. Upon the enlargement of the hospital in 1879 the present school building was erected on the north side of Chandos-street, and the school transferred to its new quarters in 1880. At that time it was thought that the accommodation afforded would for many years to come be sufficient to meet the requirements of the school. Its rapid growth, however, speedily led to congestion in some of the departments, and the council have taken advantage of an opportunity which occurred to acquire the site of two houses adjoining, and to erect a building which proves to be a most valuable extension of the premises. The departments which have been benefited are the anatomical, pathological, physiological, chemical, and that for materia medica.

The anatomical department has gained by the addition of a large, light, and airy class-room, in which is displayed

a valuable collection of diagrams, preparations, and anatomical plates of sections of frozen bodies. A well-lighted and ventilated prosector's room adjoins the post-mortem room for the use of the curator.

The principal improvement is, however, the erection of a new anatomical and surgical theatre. This will accommodate 200 students; it is large (34 ft. by 28 ft. 6 in.), lofty, well lighted by a large lanthorn light, and efficiently ventilated; and a new feature is that the drawing-board is of ground glass, blackened at the back, an invaluable addition to the teaching material if the teacher happens to be an artist. The rising staging is semicircular in plan, fitted with seats and iron book-boards. Access to the upper part of the theatre is obtained by a well-arranged staircase in the corridor. All the joinery is of polished teak, giving a very handsome appearance to the room, which is in other ways skilfully treated from an architectural point of view.

The pathological department has been transformed from a room little better than a cupboard into an excellent practical class laboratory, well lighted and fitted with every appliance, gas, water, and sinks. There is a dark room for photography and a private laboratory for the pathologist.

It is in the physiological department that the changes wrought are most apparent. The new laboratory is a noble room 50 ft. long by 27 ft. wide; it is of good height and capitally lighted by large Venetian windows on both sides. There are well-arranged desks for fifty-two students, each having the use of gas, water, a sink, a lock-up microscope cupboard and drawer. Shelves for reagents and opal and black glass "slates" fixed to the desks for notes and mounting purposes. The appliances of the fume chamber, hot-air incubator, vacuum pump, water motor, &c., have not been forgotten. In fact, there are few laboratories in the kingdom devoted to physiological research where the arrangements are so complete and the appliances for teaching so convenient. The physiologist has also a large private room, fitted with glass cases to hold the more delicate instruments, and there is a dark room properly equipped for photographic purposes. This, with the existing physiological theatre, capable of accommodating 150 students on a well-arranged rising platform, makes the whole department very complete.

The removal of the chemists' working laboratory to the front of the building has permitted a considerable extension of the chemical theatre and class-room for practical chemistry, so that it will no longer be necessary to duplicate the lectures. A spare class-room has also been provided. The walls are fitted with glass cases, in which the materia medica museum is to find a home. There are many other improvements of a practical nature throughout the building which greatly add to the comfort and convenience of the students. The frontage in Chandos-street has been more than doubled, and the school is now quite an imposing building. In the construction everything is of the most substantial nature. Teak and pitch pine have been largely used for the fittings. Parian cement has been employed for lining the walls, and the floors are of asphalte and oak. The ventilation is by special air flues, and is most efficient. A complete system of hot water warming is provided, as well as open fires in many of the rooms.

The whole of the works have been designed by Mr. John J. Thomson, A.R.I.B.A. (the architect to the hospital), who erected the original school building, and the contractors for the new buildings were Messrs. Higgs and Hill of South Lambeth, and for the internal alterations, Messrs. D. G. Laing & Sons of Duke-street, Adelphi, all of whom have very efficiently carried out the work entrusted to them.

MEDICAL TRIALS.

LONG *v.* CHITTENDEN.

THIS case was heard at the Dover County Court, before his honour, Judge Selfe, Mr. Martin Mowll appearing for the plaintiff, and Mr. A. Booth Hearn of Chatham for the defendant.

Mr. Mowll, in opening the case, said he appeared for the plaintiff, Mr. Arthur Long, a medical man in practice at Dover, and the claim was for £21 for professional attendance on the defendant, who was also a medical man, but retired from practice, and residing at Kearsney, near Dover. It would be seen that the real question was whether the plaintiff was entitled to make any charge. A statement had been made that there was an agreement not to do so, but his client said he never made it. It was also asserted that a custom existed in the medical profession that no charge should be made for attending a medical man.

Mr. Arthur Long, a medical man practising in Dover, said he was asked to attend the defendant in May, 1888, and continued to do so up to March 25th, 1890. For these services there was due to him £21. The defendant's wife called upon him, and offered him £10 10*s.* to settle, but he declined to consider the matter, and a writ was issued. The witness believed that medical men, as a rule, in actual practice did not charge one another, but when the charge was made it was always paid unless the patient was in poor circumstances. He had seen another doctor attending the same house, but he had not sent in his account out of a vindictive spirit. He admitted that he had attended medical men before without making any charge, and was told so by Dr. Tanner, who asked him to attend. He believed there was no custom that a retired medical man in affluent circumstances should be attended without charge. It was the usual thing to attend a doctor actually engaged in practice without charge, but that depended upon the pecuniary means of the individual.

Dr. Ormsby said he attended twice during the illness of Dr. Chittenden in consultation, for which he expected to receive his customary fees.

For the defence, Dr. J. Chittenden, M.R.C.S., said he lately lived at Kearsney, near Dover, but was now residing at Dover. He was a member of the Royal College of Surgeons, and had practised since 1842, and his name was still on the lists. He said that he had come to Kearsney three years ago, and soon afterwards Mr. Long called upon him and friendly relationship sprang up. About Christmas, 1887, Mr. Long saw him professionally, and they had a conversation about the liberality of the profession. At his next illness, in 1890, Dr. Tanner attended him. The case was not very satisfactory to that gentleman, and he introduced Dr. Ormsby, as a friend and neighbour of Mr. Long, to see him. It was decided to perform an operation, but he made an objection to it. He saw his son and others about it, and they objected, and it was not performed. He afterwards saw Mr. Long and apologised for having seen another doctor. Two days afterwards two letters were received from Mr. Long—one to his wife enclosing the bill, and another to him saying that the £2 2*s.* paid to Dr. Ormsby for visiting him was included in the bill. He never made Mr. Long any offer or authorised his wife to do so. It was the custom in the medical profession never to charge any fees for attending a medical man, his widow, or orphans. It was usual to make an acknowledgment in the profession by some gift. It was always considered an honour to attend another medical man.

Mrs. Chittenden said she went to Mr. Long without anyone's knowledge. She did not offer him any money, but anything to the value of £10 10*s.* It was simply to be a complimentary present, and not as a settlement of the bill.

His Honour, in giving judgment, regretted that the case had been brought into court. He did not think that the agreement, which rested on a very shadowy foundation, was proved. With regard to the custom, it was a matter that should go to a jury. On the previous evening he had been looking in THE LANCET at the correspondence on the same subject, where medical men were asked for advice under circumstances wherein the practice was carried to unreasonable length, and then they simply sent a letter of thanks for the services rendered. Of course THE LANCET, although a most important authority on the etiquette of the medical profession, was not a guide to the court. But he did not consider that the defence had proved that it was a custom to be attended free, so it was his opinion that the plaintiff was entitled to charge for his services, and he should allow the claim.

MEDICAL FEES IN RUSSIA.—According to a contemporary, the Medical Council of St. Petersburg has under consideration a project to fix the fees of medical men. It is intended to divide patients into three classes, according to their pecuniary capacity; and, again, to divide towns into three categories, according to population. In accordance with this classification there will be nine fees, ranging from about a shilling to a pound.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria at Brinkworth, by Dr. BRUCE LOW.[1]—Diphtheria and croup have for some years past been prevalent in the rural sanitary district of Malmesbury, and a large proportion of the deaths have occurred in Brinkworth, which contains only about one-tenth of the population of the union. The story told by Dr. Low is one which all who have studied diphtheria must know to be typical of the disease in its epidemic form. Imported into Brinkworth in 1887, the serious nature of the affection was not recognised until it had begun to spread by direct infection; then came varying intervals with occurrences of "sore-throat," which should under such circumstances always be dealt with as potentially diphtheria; soon there followed a fatal attack of so-called "laryngeal croup," and occurrences of diphtheria, croup, tonsillitis, quinsy, sore-throat, and, indeed, affections of almost any name, amounting to sixty-three in all. And these, together with other throat attacks, between March and October of last year can hardly have numbered less than 200. Then came that fatal hesitancy as to what the disease was to be called; some said it was diphtheria, others that it was something else, and the usual result was that the schools remained open, and through them the disease mainly spread. Of thirty-one families infected, in twenty-seven the first case occurred in a child attending the Board School, and on the reopening of the school after the midsummer holidays a batch of eight fresh cases occurred among the scholars. These are facts which were elicited at the inquiry, and if they were not known locally in advance, they ought to have been. One medical man seems to have grasped the situation early, and in May he stated to the chairman of the School Board that it was advisable to close the school in order to stop the malady. At this stage the medical officer of health is reported to have given his opinion that in only one patient had he seen "the typical appearances of diphtheria," and in the end the school was not closed, exclusion from infected houses being relied on, and even this was not thoroughly carried out. We have no reason to doubt the accuracy of the opinion as to "typical" diphtheria being limited to a solitary case, but we do hold that enough is known of diphtheria in the present day to call for as much decision and promptitude in dealing with a throat affection such as prevailed so seriously in Brinkworth as is needed when all the cases are typical. The typical cases are not to be compared in point of danger, in so far as spread is concerned, with those undefined attacks which were allowed to diffuse themselves about Brinkworth from November, 1887, to October, 1889; and all because certain people, including officials connected with the Board School, the annual inspection at which was pending, did not regard the cases as sufficiently characteristic to warrant a certain name being given to them. It is nothing short of dangerous to draw the line for preventive purposes at clinical appearances in individual cases; and this especially in face of a history such as that which comes from Brinkworth, and which has been told again and again in different places for years past.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Holborn.—Dr. Septimus Gibbon announces a death-rate of 21·2 per 1000 during 1889, and he adds that it is the lowest on record. It was 3·8 above that for the metropolis generally, but Dr. Gibbon calculates it to have been 5·28 below the corrected rate for the central districts of London. A number of the infectious diseases fortunately exhibited diminution last year; the mortuary was most usefully resorted to, and several dwellings were dealt with under Torrens' Act. A considerable portion of the report is devoted to the question of the reduction by the County Council of slaughter-house licences, and it is indicated that the closure of one of these institutions has led to hardship in the neighbourhood. We trust that this result, often unavoidable, will be temporary only, for our conviction is that in the end the abolition of such places in thickly populated areas will be most beneficial to the public.

Ipswich Urban District.—The most interesting part of Mr. Elliston's annual report is an account of diphtheria in the borough during 1889. In 1874 the diphtheria deaths reached thirteen; in 1877 they were ten; but between those years and since the latter one there had been no exceptional prevalence until last year when thirty fatal attacks occurred, in addition to fourteen from "croup." Mr. Elliston is able largely to exclude personal infection as an originating cause, and milk he puts entirely aside. He seems to think that the infection has possibly been lurking in the sewers, and as a result he has urged that the culverts should be flushed with a solution of perchloride of mercury. Fear of killing fish in the river by means of the effluent prevented his advice being taken, but a chemical opinion has now been obtained warranting the use of the germicide in question. During the course of the epidemic, Dr. Airy of the Local Government Board conferred with Mr. Elliston on the diphtheria prevalence. It is curious that, with a hospital for infectious diseases lying empty for six months, no cases of diphtheria have been removed there, and this when six fatal cases occurred in one quarter only of that period. The general death-rate of Ipswich for 1889 was 18·8 per 1000. This was an increase on recent years, and it was mainly due to whooping-cough, diphtheria, and diarrhœa.

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam and Charles Black, Edinburgh; Hodges, Figgis, and Co., Dublin; price 6*d*.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5405 births and 3870 deaths were registered during the week ending Oct. 18th. The annual rate of mortality in these towns, which had been 19·3 and 19·8 per 1000 in the preceding two weeks, further rose last week to 20·8. The rate was 20·5 in London and 21·0 in the twenty-seven provincial towns. During the first three weeks of the current quarter the death-rate in the twenty-eight towns averaged 20·0 per 1000, and exceeded by 0·4 the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 12·3 in Nottingham, 13·9 in Plymouth, 15·7 in Portsmouth, and 16·7 in Birmingham; the highest rates were 25·2 in Sunderland, 25·8 in Preston, 26·6 in Blackburn, and 28·0 in Manchester. The deaths referred to the principal zymotic diseases, which had declined in the preceding three weeks from 694 to 639, rose again last week to 647; they included 285 from diarrhœa, 121 from measles, 65 from scarlet fever, 61 from diphtheria, 59 from whooping-cough, 56 from "fever" (principally enteric), and not one from small-pox. The lowest death-rates from these diseases were recorded in Huddersfield, Plymouth, Derby, and Nottingham; the highest in Bradford, Manchester, Birkenhead, and Preston. The greatest mortality from measles occurred in Preston, Brighton, Manchester, Oldham, Bradford, and Birkenhead; from scarlet fever in Sunderland and Liverpool; from whooping-cough in Wolverhampton and Newcastle-upon-Tyne; and from diarrhœa in Bolton, Manchester, Sheffield, Leicester, Blackburn, and Preston. The mortality from "fever" showed no marked excess in any of the large towns. The 61 deaths from diphtheria included 41 in London, 5 in Birmingham, 3 in Manchester, 3 in Salford, 2 in Portsmouth, and 2 in Birkenhead. No death from small-pox was registered in any of the twenty-eight towns; and no small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals or in the Highgate Small-pox Hospital on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of last week was 1921, against numbers increasing from 1427 to 1850 on the preceding eight Saturdays; the patients admitted during the week were 208, against 249 and 225 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 262 and 197 in the preceding two weeks, rose again last week to 340, but were 7 below the corrected average. The causes of 52, or 1·3 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Bristol, Leicester, Sunderland, and in eight other smaller towns. The largest proportions of uncertified deaths were recorded in Sheffield, Liverpool, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·0 and 18·2 per 1000 in the preceding two weeks, further rose to 19·4 during the week ending Oct. 18th, but was 1·4 per 1000 below the rate that prevailed during the same period in the twenty-eight large English towns. The rates in the eight Scotch towns ranged from 14·7 in Paisley and 15·7 in Greenock to 20·3 in Perth and 22·0 in Glasgow. The 501 deaths in the eight towns showed an increase of 30 upon the number in the preceding week, and included 25 which were referred to diarrhœa, 16 to whooping-cough, 13 to measles, 8 to scarlet fever, 7 to diphtheria, 5 to "fever," and not one to small-pox. In all, 74 deaths resulted from these principal zymotic diseases, against 82 and 70 in the preceding two weeks. These 74 deaths were equal to an annual rate of 2·9 per 1000, which was 0·6 below the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of diarrhœa, which had been 38 and 28 in the preceding two weeks, further declined last week to 25, of which 10 occurred in Glasgow, 5 in Edinburgh, and 5 in Aberdeen. The 16 deaths referred to whooping-cough exceeded by 6 the number in the previous week, and included 10 in Glasgow. The fatal cases of measles, which had been 8 in each of the preceding two weeks, rose to 13 last week, of which 6 occurred in Glasgow, 3 in Greenock, and 3 in Paisley. The 8 deaths from scarlet fever corresponded with the number in the previous week, and included 2 in Aberdeen, 2 in Paisley, and 2 in Glasgow. Of the 7 fatal cases of diphtheria, 3 occurred in Leith and 2 in Edinburgh; and of the deaths referred to "fever," 3 were recorded in Dundee. The deaths referred to diseases of the respiratory organs in the eight towns, which had declined from 95 to 74 in the preceding three weeks, rose again last week to 91, but were 27 below the number in the corresponding week of last year. The causes of 58, or nearly 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 19·4 and 19·5 per 1000 in the preceding two weeks, further rose to 21·3 during the week ending Oct. 18th. During the first three weeks of the current quarter the death-rate in the city averaged 20·1 per 1000, the rate for the same period being 18·2 in London and 18·6 in Edinburgh. The 144 deaths in Dublin showed an increase of 12 upon the number in the previous week; they included 13 which resulted from diarrhœa, 6 from "fever," 4 from whooping-cough, and not one either from small-pox, measles, scarlet fever, or diphtheria. Thus the deaths referred to the principal zymotic diseases, which had been 19 in each of the preceding two weeks, rose last week to 23; they were equal to an annual rate of 3·4 per 1000, the rate from the same diseases being 2·9 in London and 1·7 in Edinburgh. The fatal cases of diarrhœa, which had declined in the preceding three weeks from 13 to 9, rose again last week to 13. The deaths referred to different forms of "fever," which had been 4 and 7 in the previous two weeks, declined to 6 last week. The 4 fatal cases of whooping-cough exceeded the number recorded in any recent week. Four inquest cases and 4 deaths from violence were registered during the week; and 40, or more than a fourth, of the deaths occurred in public institutions. The causes of 16, or more than 11 per cent., of the deaths in the city were not certified.

THE SERVICES.

ARMY MEDICAL RESERVE OF OFFICERS. — Surgeon Charles William Thorp, F.R.C.S.I., 2nd Volunteer Battalion, the Lancashire Fusiliers, to be Surgeon-Major, ranking as Major (dated Oct. 22nd, 1890); Surgeon John William Ellis, 6th Volunteer Battalion, the King's (Liverpool Regiment), to be Surgeon, ranking as Captain (dated Oct. 22nd, 1890); Acting Surgeon David Edgar Flinn, F.R.C.S.I., 5th (Irish) Volunteer Battalion, the King's (Liverpool Regiment), to be Surgeon, ranking as Captain (dated Oct. 22nd, 1890); Acting Surgeon George Hollies, 2nd Volunteer Battalion, the King's (Shropshire Light Infantry), to be Surgeon, ranking as Captain (dated Oct. 22nd, 1890).

ADMIRALTY. — The following appointments have been made:—Surgeons: Vidal G. Thorpe to the *Raleigh* (dated Oct. 17th, 1890); William G. Meade to be Surgeon and Agent at Kinsale.

VOLUNTEER CORPS. — *Artillery:* 3rd Middlesex: Lieutenant-Colonel L. B. Stevens is granted the honorary rank of Colonel (dated Oct. 18th, 1890); John Irwin Palmer, Gent., to be Acting Surgeon (dated Oct. 18th, 1890).—1st Caithness: Acting Surgeon J. L. Waters, M.B., resigns his appointment (dated Oct. 18th, 1890).—5th (Irish) Volunteer Battalion, the King's (Liverpool Regiment): Acting Surgeon D. E. Flinn to be Surgeon (dated Oct. 18th, 1890).

Correspondence.

"Audi alteram partem."

"DEATH DURING THE ADMINISTRATION OF METHYLENE."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of the 11th inst., p. 768, there is a report of a death during the administration of methylene at the Plymouth Hospital. I was the first to perform an operation under the influence of methylene as an anæsthetic. It was in 1870, and Dr. Richardson (who introduced the anæsthetic) administered it. Since then I have very seldom used any other anæsthetic, and I have repeatedly endeavoured to make known that it is quite as efficient and much safer than chloroform, and free from the many objections to ether. But I have also argued that it must be given freely diluted with air, and that when Junker's apparatus is used not more than from 2 to 4 per cent. of methylene vapour can be administered. Whenever I read of a case of death under methylene I inquire into the circumstances, and have done so in this case at Plymouth. In reply to my inquiries, Mr. Gifford Nash writes:—

"The mask that we use for methylene I think must be Rendle's. The mask is shaped like a flattened cone, and in the roof are about a dozen holes to admit air. The methylene is poured on to a sponge or piece of lint, which fits into the upper part of the mask. We obtained ours from Messrs. Lynch of Aldersgate-street. The amount used for each operation is very large, usually an ounce and sometimes two. This, I think, must be very excessive, and makes it several times as expensive as chloroform. The only other objection I have to methylene is the sickness which comes on usually twelve hours after administration."

I have seen this inhaler, and I do not wonder at it causing death, whether chloroform or methylene is used. What a patient breathes is the vapour of one or the other, not diluted with air, but mixed with the vapour thrown off by the patient at each expiration. A more dangerous contrivance it would be difficult to imagine. One cannot wonder either at the waste of the anæsthetic or the sickness which follows such a mode of administration, and one can only wonder that deaths are not more frequent. It has been a matter of surprise to me that with such frequent deaths from chloroform and such extremely few deaths from methylene, and these to be explained by faulty administration, the use of methylene by Junker's inhaler has not become more generally known. The inhaler answers equally well for chloroform or methylene. At the Samaritan Hospital chloroform is now the favourite, I hardly know why, as the only death from an anæsthetic which has occurred in that hospital since its foundation was under chloroform. I have never, either in hospital or private practice, since I began to operate in 1870 under methylene; ever seen anything approaching to danger under its influence, nor have I had a moment's uneasiness or apprehension such as I have repeatedly suffered during the administration of chloroform, ether, the A.C.E. mixture, laughing gas followed by ether, or the mixtures of chloroform and alcohol which some have supposed to be identical with or substitutes for methylene. And it is very seldom that in the most prolonged operations—say, for an hour—more than from six to eight drachms of methylene are used, while I have repeatedly found that in operations of fifteen to twenty minutes not more than from two to three drachms have been evaporated.

I am, Sirs, your obedient servant,

T. SPENCER WELLS.

Upper Grosvenor-street, W., Oct. 20th, 1890.

SUBUNGUAL EXOSTOSES.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Sept. 27th Mr. Roger Williams advances the theory that these morbid growths are really supernumerary digits. It seems hardly warrantable to resort to such a recondite explanation, when a much more obvious and plausible method of accounting for the phenomena in question is ready at hand; and this in spite of possible analogies to the case of the Sauranodon, with other pentadactylous or even heptadactylous vertebrates. The pressure of tight boots is the cause usually supposed to give rise to these painful little neoplasms; and the previous existence of such a condition was markedly conspicuous in a young woman aged eighteen, from whose great toe I have just excised one which had been present ten months only. This little tumour was about the size of a pea and appeared exactly central. Just as from the same source the great toe is most prone to the complaint called "in-growing toe-nail," so the incidence of pressure will probably be found to explain all the phenomena of subungual exostoses, such as their proclivity to attack the member in question, to grow on (or perhaps it should rather be "towards") the tibial side of the foot, &c. Hence results, it may be presumed, a condition of hyperæmia in the periosteum; a sort of "irritative periostitis." I am, Sirs, yours truly,

Gloucester-place, W., Oct. 13th, 1890. HERBERT SNOW.

"VALUE OF THE INTRA-UTERINE STEM."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Oct. 18th is a note from Dr. More Madden on the "Value of the Intra-uterine Stem," in which he says he has used with advantage "Mr. Duke's spiral wire stems as recently introduced by Messrs. Arnold." I exhibited last night to the British Gynæcological Society specimens of the spiral wire stems made for me more than fifteen years ago by Messrs. Weiss. These are made of alternate copper and zinc wire, so that they serve the double purpose of maintaining patency of the cervical canal and of exerting a slight galvanic action upon the uterine tissue, promoting menstruation in cases of amenorrhœa, and involution in cases of hyperplasia. They have the advantage of not being rigid.

I am, Sirs, yours truly,

Harley-street, Oct. 23rd, 1890. ROBERT BARNES.

INTUBATION OF THE LARYNX.

To the Editors of THE LANCET.

SIRS,—In reply to the communication from Dr. Theodore Maxwell, in the issue of THE LANCET of Sept. 27th, relative to a device for removing the intubation tube by the use of an electro-magnet, I would say that such attempts have been made without success. Dr. G. L. Kingsley, who died last month while interne at the Massachusetts General Hospital, Boston, had devised some instruments for this purpose, but, with many trials and modifications, was never able to obtain an electro-magnet that would raise any kind of an intubation tube from the larynx on the cadaver. I write this as Dr. Kingsley left no record of his experiments.

I am, Sirs, yours truly,

New York, Oct. 7th, 1890. C. L. GIBSON, M.D.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Opening of the Winter Session at the Medical Faculty, Liverpool University.

THE winter session here has opened under unusually favourable auspices. Sir James Paget's address has already appeared in THE LANCET, and ranks as one of his best utterances. To have heard it delivered was something to remember. It must have been gratifying to Sir James Paget to see amongst his audience many an old pupil of his at St. Bartholomew's Hospital, some of whom now fill important positions in Liverpool and elsewhere, while his reception both in St. George's Hall and at the annual dinner was most enthusiastic.

The Royal Infirmary.

The arrangements for the opening of the new infirmary on the 29th inst. are rapidly approaching completion. Great interest is being taken in the proceedings, and every desire is being shown to give the Duke of Clarence and Avondale a hearty welcome on this his first visit to Liverpool on so auspicious an occasion. It may be truly said that the building is worthy of Royalty at its opening. It excited the admiration of Sir James Paget, who went over it and expressed his perfect approval of all he saw. In the course of time, when some old buildings which somewhat mar the effect have been removed, the external appearance will leave nothing to desire. Internally the building will bear the most critical inspection.

The Anatomical Rooms of the Liverpool School of Medicine.

The new entries to Professor Banks' anatomical class are 32. In all 66 are attending his lectures, while a total of 84 are dissecting. The anatomical rooms have reached a state as nearly approaching perfection as is possible. In addition to all the usual conveniences for dissecting there are separate rooms for classes studying the bones, and for those who wish to read quietly apart from dissecting there is accommodation approaching the luxurious. The preparations of brain sections, and indeed of every part of the body, are ample, and those who cannot learn anatomy under such favourable surroundings must have mistaken their profession. To achieve all this has cost a very large sum of money, which has been raised by friends to whom the professor has appealed, and who have generously responded. The supply of subjects is always sufficient, and the facilities for learning anatomy at the Liverpool School will compare favourably with those of any other school, provincial or metropolitan.

The Mayoralty.

There is every probability of the office of mayor and chief magistrate of Liverpool being filled during the ensuing municipal year by Mr. Nicholas Marah, M.R.C.S., who has for some years past been a member of the City Council, and is highly respected by a large circle of friends. The last medical holder of the mayoralty was Dr. Gerard, in 1808.

The Abattoir.

It will be remembered that the proposal to renew the lease of the Abattoir Company was strongly opposed on sanitary grounds, it being situated in the midst of a large population. The application to renew the lease had been repeatedly refused by the Finance Committee, but was granted by the whole Council. It was felt that the matter could not rest here, but, fortunately, further contention has been averted by the Abattoir Company declining to accept the renewal of the lease on the terms demanded. They have still twenty years of unexpired lease, but before then it is hoped that public opinion will have induced them to remove outside the city, where all such occupations ought to be.

Liverpool, Oct. 22nd.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Carlisle: The Abuse of Medical Charities.

A WRITER in the *Carlisle Journal*, referring to some important conferences which have been held lately between the representatives of the Cumberland Infirmary and the Carlisle Dispensary, with a view to check the abuse of those two charities, says that a feeling has for some time prevailed that many of the out-patients of the dispensary were not those for whom the charity of the two institutions, as defined by the rules, was contemplated by the founders. It had been discovered, moreover, that many patients patronise both the infirmary and the dispensary at the same time, taking medicine and advice from both. Whether, the writer goes on to say, this is done for the purpose of obtaining a second opinion on their cases or securing a larger quantity of medicine cannot be stated with any degree of certainty; but he thinks that the experience of some of them as to different diagnosis and treatment in the two institutions would be interesting. It is not often, he thinks, that such patients have the chance of getting two thoroughly independent opinions. However, this privilege will be withdrawn forthwith, as the infirmary and dispensary will exchange weekly lists of the patients on their books, and patients who appear on both will have the

option of selecting one of the two. A cautious inquiry into the circumstances of the patients is also to be instituted.

The Typhoid Fever Epidemic in the North of England.

At Middlesbrough last week Dr. Malcomson reported to the Fever Hospital Committee that since the last meeting forty-seven patients had been admitted, and that three members of the hospital staff were ill with the disease. Dr. Malcomson believed that the failure of the water-supply at the hospital had something to do with the illness of the nursing staff. He said that in Middlesbrough since the end of September there had been ninety cases of typhoid fever certified, and nine deaths had occurred in the same time from the disease, and that for the ten months of 1890 the number of cases had been four times as great as during the same period in any previous year. At Stockton the medical officer of health (Mr. Clegg) has reported that during the past fortnight there had been sixty-seven more cases of typhoid fever, and he has stated to the authorities that additional hospital accommodation is necessary.

Surgeon T. H. Parke, A.M.D., in Newcastle.

On Monday night Surgeon Parke delivered his lecture on "Incidents connected with the Relief of Emin Pasha." There was a large and brilliant assembly, and the distinguished traveller was received with enthusiastic cheers. The *Newcastle Daily Chronicle* says "that a most remarkable feature was the lecturer's extreme modesty, and that not once did he mention those special acts of his own which did so much for the success of the expedition, and lent to it no small degree of its halo of romance." No lasting honour, says the same writer, has been paid Mr. Stanley and his companions, although by their services they were instrumental in winning our new African empire. On Tuesday Surgeon Parke was presented to the University of Durham, when, with Mr. H. M. Stanley, he had conferred upon him the degree of D.C.L. On Wednesday Surgeon Parke visited the Newcastle Medical College, when he received the acclamations of the students. Professor Philipson did the honours of conducting the distinguished guest and visitor in his usual graceful way.

Alnwick Infirmary.

The annual meeting of the Alnwick Infirmary has been held, Earl Percy presiding. The report showed that nearly 800 patients altogether had been treated. Upon the whole there had been a marked diminution of patients, which indicated an improvement in the health and sanitary condition of the town. At the same meeting Mr. C. Clark Burman was unanimously elected an honorary physician to the infirmary.

Newcastle-on-Tyne, Oct. 23rd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Probable Vacancy in the Parliamentary Representation of the Universities.

OWING to the death of one of the judges of the Court of Session and the resignation of another it is anticipated that the present member for the Universities will be promoted to the Bench. It has therefore become a matter of speculation who the next representative is to be, and there appears to be little doubt that if a well-known Edinburgh Infirmary surgeon would allow himself to be nominated he would have an easy victory—if, indeed, he had any serious opposition—and a safe seat.

The Edinburgh Water-supply.

The engineers who were appointed by the Edinburgh Water Trust to report on the water-supply have been in town inspecting the plans of the present works and the fittings and apparatus at present in use, and in other ways making themselves familiar with the points on which they have to form an opinion.

Bequest to the Edinburgh Royal Botanic Garden.

The botanical library and herbarium of the late Mr. John Ball, the botanist and traveller, have, after certain selections were made from them for Kew, been presented by Mr. Ball's trustees to the Royal Botanic Garden. There are about 500 volumes, besides pamphlets.

Extension of the "University Hall," Edinburgh.

What is known as the University Hall is a house with historic associations in a picturesque situation in the Old Town, which a year or two ago was fitted up, mainly by the enterprise of Professor Geddes, now of Dundee, as a residence for students. The accommodation provided for each resident varies according to the rent each man wishes to pay; but there is a common table, and the establishment is managed by the residents themselves. The purpose in view was to encourage social residence and intercourse amongst the students, and to associate this with the extension of University influence among the people. With the latter object in view, the building referred to was selected from its proximity to one of the poorer districts in the city. The Hall has been so successful that a second building has been acquired in Riddle's-court, Lawnmarket, which has been thoroughly cleaned, generally overhauled, and rehabilitated. The entrance is anything but aristocratic, but once the inner court, in which the house is situated, is reached, the aspect of external things is changed. The house itself has, like the Hall, sufficient years and architectural effect to imply a history. Internally the building has undergone a transformation, its stained floors and clean and tastefully decorated walls producing an effect which those who knew the building in its former state would hardly have thought possible. Last week this new residency was formally opened by an "at home" given by Professor and Mrs. Geddes and the residents in University Hall, when the building was thrown open for inspection to the guests. The Solicitor-General, in a complimentary and encouraging speech, formally declared the rooms opened.

Edinburgh Public Health.

At the meeting on Monday of the Public Health Committee it was reported that the total number of deaths registered during the month of September was 337, making the death-rate 14·91 per 1000 of the estimated population. The average death-rate of the corresponding month during the preceding five years was slightly below this—namely, 14·57 per 1000. As regards age, 38·27 per cent. were below five years, and 26·40 per cent. above sixty years. Deaths from diseases of the chest amounted to 26·70 per cent. of the whole, while zymotic diseases accounted for 8·90 per cent. There were 561 births registered during the month, of which 288 were males and 273 were females. During the same period 190 cases of infectious diseases were intimated, compared with 320 in September, 1889, and 92 in the same month of 1890. During the month 109 patients were admitted to the City Hospital. It was also reported that 16,355 lb. of diseased meat were seized or delivered up in the city during the month. At the same meeting the opinion was expressed that powers should be taken for the erection of model dwelling-houses by way of experiment.

Edinburgh Royal Maternity Hospital.

The present house-surgeons to this institution, Drs. E. F. Armour and J. Lawson Williams, are to be succeeded by William Paterson, M.B., C.M., and Alexander Scott Duncan, M.B., C.M.

Opening of the Royal Medical Society of Edinburgh.

The inaugural address of the Royal Medical Society, which is a medical students' Society, is to be delivered this week by Mr. Jonathan Hutchinson, and is being looked forward to with much interest.

The Rectorship of the Edinburgh University.

The election to the rectorship of the University is expected to take place on Nov. 15th. Both parties have begun to stir themselves in the matter. Mr. Goschen is the Conservative candidate.

A College for Women.

The trustees of the late Henry Muirhead, M.D., LL.D., of Bushyhill and Longdales, Lanarkshire, N.B., have published the particulars of his last will and testament, by which a considerable sum of money has been bequeathed for the purpose of advancing the education of women. The testator has named fourteen trustees and executors, along with the gentlemen, selected from the governors of the Glasgow and West of Scotland Technical College, and directed them—subject to certain liferent provisions and legacies—to apply his estate to found and maintain an institution to be named the Muir-

head College, "for the instruction and education of women in medical and biological sciences, where women may receive an education to fit them to become medical practitioners, dentists, electricians, chemists, &c." The trustees, having obtained probate, have had several meetings, and it is expected that in the course of a few months they will be in a position to announce the arrangements they have been able to make. As the estate consists chiefly of lands, its money value must in the meantime be more or less a matter of opinion. The trustees, however, are hopeful that £30,000 at least will be available for the College.

Proposed Matthews Duncan Memorial.

Principal Geddes presided over a meeting held in Aberdeen on Monday last, when it was resolved to commemorate Dr. Matthews Duncan's connexion with Aberdeen by a memorial of some kind. It was proposed that this should take the form of a bust, to be placed in the University, and, if possible, of a prize or scholarship in connexion with the medical school.

Dr. J. B. Readman, analytical and consulting chemist, of Edinburgh and Glasgow, has been appointed by the Royal College of Surgeons of Edinburgh one of their Examiners in Public Health.

Oct. 21st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

St. Vincent's Hospital, Dublin.

Mr. McArdle delivered the inaugural address at this hospital on Saturday last, and to a great extent directed his attention to the treatment of army medical officers. Many of those present, he said, would no doubt aspire to positions in that service, but whatever their abilities, whatever their attainments, literary or scientific, they shall have worked in vain for a recognised position. In their army alone, of all the armies in the world, was the surgeon a nonentity. There they had no recognised position, no rank, but were merely appendages, and were treated as if not essential to the well-being of the body of which they were a part, and for which they had done so much. A spirit unworthy of Englishmen had sprung up in the ranks of the combatants, and apparently they wished to place the profession of arms on a pinnacle high above that of medicine. That was not the place to contrast the ways of peace with those of war; that was not the place to inquire whether he who devoted his energy to the science of destruction should rank higher than the one who stands between the destroying angel and his victim. An enlightened public knew full well which enters the service of their country with the more reliable stamp. There was a time when their best men thronged the home and Indian services; but the unsatisfactory state of these departments had caused a sad falling off in competitors. So long as the service was so unpopular, men of culture and great ability would seek elsewhere the position they were refused in our army. When the difficulty of entering the profession became greater, and consequently the number admitted became less, their ranks would close up and demand a proper treatment of their members in whatever service they might be placed. A time would come when the War Office would do justice to a body which had been a credit to the service. No mercenary motive inspired them; what they asked was a recognition of their proper position in the army, which would be equivalent to that held by surgeons in the armies of France, Germany, and elsewhere.

Royal College of Physicians.

On St. Luke's Day, the 18th inst., Dr. J. Magee Finny was elected President of the College for the ensuing year. When referring to the great probability of Dr. Finny being selected by the Fellows a couple of weeks since, by a clerical error I mentioned Dr. Little as being his predecessor in office, instead of Dr. Lombe Atthill. The mistake was so apparent as almost not to require correction. Dr. Atthill, the outgoing President, has been re-elected representative of the College on the General Medical Council. At the same meeting three candidates nominated for Fellowship were duly elected—viz., Dr. O'Carroll, and Messrs. Lapper and Norman.

Dublin Hospital Sunday.

Collections in aid of certain of the Dublin hospitals will take place on Sunday, Nov. 9th. Last year the total amount collected was £4155 5*s.* 4*d.*, being an increase of £58 15*s.* 1*d.* as compared with the previous return.

The Queen Victoria Convalescent Home.

This new medical institution was opened on Saturday last by the Countess of Shaftesbury. The building is situated in Newtownbreda, one of the most healthy of the suburbs of the city of Belfast. It is an offshoot of the Belfast Hospital for Sick Children, which was established in 1873. For the erection of the new building a sum of £3000 was needed, all of which (including £500 from the trustees of the late Hugh M'Calmont of London) has been subscribed. The success of the undertaking is due entirely to the exertions of the ladies' committee. The building, which is in the Queen Anne style, is designed to accommodate twelve children. There are four acres of ground surrounding the home. The dining and day-room is on the ground floor facing the south, and has windows to the east and west, and there are two large verandahs, one on the south side, the other on the west, into which the children can go in case of wet weather. Everything that the most recent improvements and the most advanced science could suggest has been done to render the Queen Victoria Convalescent Home thoroughly efficient; and the Belfast Hospital for Sick Children, with this new convalescent offshoot, may now be regarded as complete in every respect, and as one of the model hospitals for children in the three kingdoms.

Royal University of Ireland.

A conferring of degrees will take place on the 29th inst., and in the evening a conversazione for the graduates and undergraduates will be held by permission of the Senate in the University buildings.

Corporation Grants to Hospitals.

The Dublin Town Council on Monday passed grants amounting to £5050 to various city charities. The grant of £250, formerly apportioned to the Rotunda Lying-in Hospital, was not included in the grants, inasmuch as the Corporation state they are dissatisfied with the constitution of the board of management.

County Galway Infirmary.

A meeting of the governors was held to-day to appoint a surgeon in compliance with a *mandamus* issued by the Court of Queen's Bench. No election took place, inasmuch as there was not a quorum present. The President of the Galway College has proposed to open the infirmary in the interest of the medical school, a suggestion which will be discussed on Saturday.

The Duties of Coroners towards Medical Practitioners.

Mr. Hepburn was recently called to an urgent case, but on arrival found the patient dead. The deceased had drunk 4 oz. of a liniment containing aconite, belladonna, and chloroform. An inquest was held by the acting coroner for the city of Dublin, but, instead of summoning Mr. Hepburn, who may be said to have been in attendance on the deceased, another practitioner was called to give evidence. I suppose this is the law, but it is one which requires alteration, and I understand Mr. Hepburn intends to bring the matter under the notice of the Council of the Irish Medical Association.

The salary of Mr. Greene, resident medical officer of the South Dublin Union Workhouse, has been increased from £200 to £225 yearly.

Mr. A. Roche has been appointed Professor of Medical Jurisprudence and Hygiene in the Catholic University Medical School.

The death-rate in Derry last week was 30·3 per 1000, the highest rate of the sixteen principal town districts in Ireland.

Oct. 22nd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Population of France in 1889.

THERE is hardly any public question receiving from all sides more attention just now in this country than that of the relative diminution of the population. It is feared, and not without reason, that at our present downward ratio the diminution, although only so far relative, is within measurable distance of becoming absolute. That is

to say, that while in England and Germany, for example, the yearly increase in the number of births is altogether out-distancing the death-rate, so that the population is augmenting by leaps and bounds, in France, on the contrary, the birth-rate, while still higher, is gradually and steadily coming down to the level of the death-rate, and bids fair before long to become a minus quantity, so that the nation will be absolutely diminishing in numbers. To all patriotic Frenchmen, therefore, the outlook is very disquieting, and the question of remedial measures a burning one. It has occupied the attention of the Chamber and Senate; papers have been read and discussions have taken place about it at the Institute and Academy of Medicine, in which various theories have been propounded as to the cause, and suggestions advanced as to remedies; but so far, owing doubtless to the inherent difficulties attending the subject, nothing definite has been determined upon. In the midst of all this the statistics as to the "movement" of the population for the year 1889 have just been issued, and are being eagerly scanned and discussed. From these I gather that the total number of births in 1889 was 880,579 and of deaths 794,933. It is interesting to compare these with those of the preceding year. In 1888 the births were 882,639 and deaths 837,867, thus leaving the year 1889 a gainer of 40,874 persons to the population. *Marriages:* Under this heading are recorded 3914 less than in 1888; the ratio per 1000 of the population was 7·1, the lowest since 1870. The average age at which unions take place is twenty-nine to thirty for males and twenty-four to twenty-five for females. It is noted that in general the departments in which take place the fewest marriages, or in which they are contracted comparatively late in life, are those which give the highest return of births, and in which, as might be expected, divorces are fewest. *Divorces:* Under this heading are recorded 4786 for the year 1889, being less by 30 than those of the preceding year. The ratio is given as 6·1 for every 10,000 married couples. Paris and its department of course have the greatest number, Britanny the fewest. It is curious to note that the liberal professions are amongst the greatest sinners in this respect; while, notwithstanding the cheapness and simplicity, not to say facility of divorce proceedings, they are comparatively infrequent amongst the lower orders, amongst whom want and penury might be expected to open the way easily to temptation and wrong-doing. Is it that the explanation is to be sought in a comparatively blunted moral sense in this class of society? The average number of births per marriage stands at three for every union. The diminution of the population is most accentuated in the south of France, where illegitimate births are least. The northern departments give the best return, but here the number of illegitimate births is greatest. The average for the whole country is 8·4 per cent., but in Paris last year out of every 100 children born 24 were illegitimate. It is further recorded that taking the whole of France, the population is found to have diminished at the rate of 5 per cent. during the last decennial period. At the commencement of this century, notwithstanding the devastation caused by the Napoleonic wars, the ratio of births was 30 for every 1000 inhabitants. This has now fallen to 23 for the same number. *Deaths:* If the number of births has diminished in 1889 there is also recorded a fewer number of deaths, and this notwithstanding the severe and fatal epidemic of influenza which caused such havoc at the end of the year. There were actually 42,934 less deaths than in the foregoing year. The death-rate for the whole of France in 1889 stands at 20·5 per 1000. In keeping with this it is found that the life average of the population is attaining a higher figure, but it is remarkable that it is in precisely those parts of the country which experience the greatest diminution in population that the life average is augmenting.

A Patent Medicines Bill.

At the opening sitting of the Chamber of Deputies, yesterday, M. Rouvier, the Minister of Finance, submitted his Bill establishing a tax on pharmaceutical specialties, toilet articles, &c. He remarked that in England a tax has been exacted on these commodities since the end of the last century, and had added enormous sums to the British exchequer. The preamble sets forth that patent medicines and other articles have been widely advertised and sold, and have given rise to quite a new branch of industry, representing large profits, inasmuch as the cost price of these products hardly amounts to more than one-tenth of the price at which they are offered and eagerly bought by the public. Thus he declared that a roll of what he termed chemical paper sold at 1*s.* 8*d.*, and cost little more than a halfpenny. A box of pills, containing products to the value of 3½*d.*, "sold on an extensive scale at 4*s.* 2*d.*" Such instances, he went on to say, might be easily multiplied. The preamble then states that in all probability the tax, which will be proportionate to the market value of the product, will be paid out of the difference between the cost price and the price of sale, so that the public will not even notice the existence of this new impost, which the Minister of Finance estimates will immediately yield not less than 12,000,000 francs, or £480,000, corresponding to an average of 8 per cent. This is a large sum, but patent medicine proprietors in this country, as well as those in England, can well afford to pay it out of their enormous profits. The only wonder is that, in view of the embarrassed state of French finances for a long time past, owing to the huge sums expended annually for military purposes and the equipment of an army of four millions of men, former French Chancellors of the Exchequer forgot the patent pill-maker.

Death of Dr. G. Monod.

The death of this surgeon, well known in Paris from twenty-five to thirty years ago, is announced at the ripe age of eighty-seven. Dr. Monod was for many years on the surgical staff of several Paris hospitals in succession, and had also served his seven years as assistant professor at the Paris Faculty. He was an able surgeon of a school now fast dying out, and enjoyed a large practice, especially amongst the Huguenot or French Protestant body, of which he was a prominent member. He was the father of Dr. Charles Monod, surgeon to the hospital of St. Antoine.

Paris, Oct. 21st.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Quarantine Board at Alexandria.

WHILE giving all praise to the hard-working president and some members of the quarantine administration, whose efforts have been attended this year by the absence of cholera imported with the pilgrims, this would seem a fitting time to protest against the constitution of this branch of the Egyptian Government. The Board is appointed by a Khedivial decree, and was divorced from the sanitary department in 1881. The latter is responsible for all health questions within Egypt; while the former, by means of medical agents at the different seaports, does what it can to prevent the introduction of human and animal disease from abroad. It has the serious disadvantage of being international, and spends more of its time in futile discussion than in honest expression of scientific opinion. An analysis of its odd composition will show how difficult it must be for its members receiving various orders from their own Governments to agree on any semi-political question. Besides the English president there are twenty-two members, fourteen of whom are medical men. Egypt, as is natural, is allowed the lion's share of seven members, all of course being Government *employés*, and including four Englishmen, a Swiss, a German, and an Algerian. France provides a vice-president and another member, while England, Austria, Germany, Russia, Italy, and Greece each supply a doctor from their own country. Turkey, however, is represented by a Greek, Spain by a Smyrniote, Portugal by an Italian, Sweden by a Greek, Belgium by a Syrian, Denmark by another Greek, and Holland by a Maltese.

Enteric Fever at Alexandria.

The Suffolk Regiment, now at Alexandria, has more than 200 men belonging to it under twenty years of age. These boys seemed well enough till the summer heat began, but since then there have been sixty-one cases of enteric fever among them with as many as fifteen deaths. This high mortality is due to the peculiar habits of the British soldier, who will not report himself sick at the beginning of his illness, and though he may die a few days after admission into hospital, the post-mortem reveals a disease of some three weeks' standing. The regiment has greatly improved in health since it was moved to a camp outside the town. Egypt is at present regarded by the War Office as a sort of seasoning ground for troops destined for India. India will

not receive men under twenty-one years of age, and it is a pity that a similar rule cannot be established for this country. The experience of many regiments here has now proved that seasoned men, though still young, can resist the influence of enteric and simple continued fever. Summer heat, excessive youth, and careless drinking are predisposing causes, which account for enteric fever being almost never absent from the army returns in Egypt.

Public Health.

The cholera scare has at least done some good, for Cairo and Alexandria have both been cleaned up and whitewashed in a very satisfactory way. The so-called drains of Alexandria have been well flushed out, as well as their engineering deformities permit. Perhaps this is the reason, added to the unusual coolness of the summer, which accounts for the weekly mortality being a good deal lower than the autumn average. Five cases of small-pox are reported from the provinces, and one case of typhus fever from near Cairo. The special preparations made in Cairo last month for a possible outbreak of cholera in Egypt were as follows:—Sites of cholera camps were selected, huts made of wood and matting were ready to be constructed in every province, £1500 worth of disinfectants and of brandy were procured from Europe, twenty ambulances were prepared, and a special springed stretcher invented for use on common country carts. Thirteen men were trained to be in perpetual readiness as the nucleus of a sanitary corps for general work, superintending ventilation, cleanliness, whitewashing, &c. Instructions in French and Arabic were prepared for prophylactic and other treatment of patients, and for disinfecting rooms, and pressure was successfully put upon the ecclesiastical wakfs to make them empty the cesspools of mosques, whitewash all their latrines and lavatories, and enclose waste spaces of land with hoardings. Also the sanitary inspectors from the provinces were brought up to Cairo and instructed on various points. The English police officers say that the country towns have never been so clean before.

Cairo, Oct. 13th.

Obituary.

JOHN SAUNDERS GRAHAM, M.D., L.R.C.P., &c.

WE regret to have to announce the early death, on the 16th inst., of this highly respected member of the profession, at his residence, Glenside House, Ballysillan, near Belfast. The deceased gentleman enjoyed excellent health until about four weeks ago, when he caught a chill, which developed into acute pneumonia, and, notwithstanding the daily attention of Professor Cuming and Dr. Whitla and Mr. Newett, terminated fatally. Dr. Graham graduated M.D. of the Royal University in 1882. Since his graduation he has had a large and widely extended private practice, and was highly esteemed wherever he was known both as a physician and a friend. In his native district, where he lived and practised, it is the universal remark, "We shall never look on his like again." The deceased was brother to the Rev. Dr. Graham of Comber and to Mr. S. Graham, District Lunatic Asylum, Belfast, and Dr. Wm. Graham, resident medical superintendent, District Lunatic Asylum, Armagh.

FOOTBALL CASUALTIES.—A young man, a member of the Mansfield Town Club, died on the 10th inst. from injuries received in the abdomen whilst playing at football at Sutton-in-Ashfield on the 27th ult.—A player named Hawksworth, in a football match on Saturday between the Grantham Rovers and the Doncaster Rovers, broke his collar bone. Several other players during the match, owing, it is alleged, to the hardness of the ground, sustained injuries.—Whilst playing in a match of football on Saturday, at the Lambeth Palace grounds, Alfred Banbridge met with an accident, and was removed to St. Thomas's Hospital.—George Gillman of Greenfield, whilst playing a football match at Holywell last week, sustained a fracture of his leg.—In a match played at Flint, William Bithell had his shoulder dislocated, and Robert Barlow fractured his ankle.—In an Association football match on Saturday, between the Melling Club and the Preston Association Club, Mr. E. Grundy sustained a bad fracture of his leg between the ankle and knee.

Medical News.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 16th inst. the following degrees were conferred:

Doctors of Medicine.—Hugh Richard Jones, St. John's; Edward Lawrence Fox, Cavendish Hostel.

Bachelor of Surgery.—James Henry Chesshyre Dalton, Trinity.

Dr. Donald MacAlister was appointed Assessor to the Regius Professor of Physic.

UNIVERSITY OF GLASGOW.—The following gentlemen have passed the Third Professional Examination, including, in the case of those marked with an asterisk, the subject of Pathology:—

James Alexander Aitken, *William Clachan Allardice, Harry Cleghorn Anderson, *William Anderson, William Barbour, Edward Beck, Robert Bishop, *Peter Otho Watkin Browne, Niel Campbell, *John Don, M.A., William Doyle, John Dunlop, Alfred Ernest Evans, John Falconer, *John Frew, *Hugh Galt, *Edwin Arthur Gibson, *John Gillmour, *Walter Buchanan Hastings, *Robert Home Henderson, William Moffat Holmes, Robert King Howat, William Jackson, Robert James, Owen Gethin Jones, *David Lamb, *John William Logie, James Marr, *Ernest Louis Marsh, *Robert James Marshall, John Miller, *John Kerr Muir, Percy Hope Murray, *William Murray, *Robert M'Ghie, James Angus Macintosh, William James M'Kendrick, Alexander Lewis M'Leod, M.A., *Percy George M'Reddie, *Robert William Nairn, Gilbert Park, William Adam Paterson, Joseph Richardson, B.A., Robert Currie Robertson, M.A., William David Rose, Arthur Thomas Scott, M.A., John Poynter Small, *George Clark Stewart, *Robert Stobo, Daniel Macpherson Taylor, M.A., *James Todd, *Ebenezer Turner, *William Watson, *James Laurie White, *James William White, *William Young, and *John Yuill.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates passed the examination in the subjects indicated during September:—

Arts.—First Class: H. J. Turner, G. O. Pierce, and A. C. Turner. *Second Class:* J. F. Bonney, W. L. Burn, U. E. Cave, F. Copeland, E. P. Corin, F. B. Feast, G. Gocher, T. H. Guillaume, J. C. R. B. Hartnell, A. A. Hingston, C. M. Lawton, G. Morris, R. S. Ransome, F. W. Rowland, R. J. Stilwell, and J. Topham.

There were 155 candidates; 87 were recorded as having passed in one or more subjects.

Surgery.—S. E. Atkins, St. Bartholomew's Hospital; H. J. L. Bullen, St. Mary's Hospital; H. S. Challenor, Cambridge University and Middlesex Hospital; J. R. Daly, Manchester; F. L. Dick, Royal Free Hospital; A. C. Dornford and M. B. Dumaresq, London Hospital; C. E. M. Hey, St. Mary's Hospital; W. Hook, Westminster Hospital; E. Lambert, Yorkshire College, Leeds, and Westminster Hospital; C. P. Lovell, B.A., Oxford University and St. Thomas's Hospital; J. More, St. Bartholomew's Hospital; C. E. Reinhardt, London Hospital; L. Roberts, Cambridge University and St. Mary's Hospital; M. Royce, Royal Free Hospital.

The following candidates, having previously passed in Medicine and in Midwifery, were granted the diploma of the Society, qualifying for registration:—

Messrs. Atkins, Hook, More, and Royce.

Medicine, Forensic Medicine, and Midwifery.—A. Allen, Charing-cross Hospital; H. J. L. Bullen, St. Mary's Hospital; H. S. Challenor, Cambridge University and Middlesex Hospital; J. R. Fuller, St. Mary's Hospital; C. E. A. MacArthur, Glasgow University; H. Sanders, Charing-cross Hospital; J. Spurr, St. Mary's Hospital.

Medicine and Forensic Medicine.—C. P. Lovell, B.A., Oxford University and St. Thomas's Hospital; C. A. Morgan, St. Thomas's Hospital.

Medicine and Midwifery.—F. C. Rogers, Victoria University, Owens College.

The subjoined candidates, having previously passed in Surgery, were granted the diploma of the Society, qualifying for registration:—

Messrs. Bullen, Challenor, MacArthur, Sanders, and Spurr.

ST. VINCENT'S HOSPITAL, DUBLIN.—The following prizes have been awarded for the past session:—Gold medal in Clinical Medicine: Edward Cosgrave. Gold medal in Clinical Surgery: Garrett A. Hickey. Special Prize: Douglas W. Wright. Junior Clinical Prize: T. C. Cummins.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.—The autumn general meeting will be held at 11, Chandos-street, Cavendish-square, on Tuesday, Nov. 25th, at 5 P.M., the President, Dr. George H. Kidd, in the chair. The Association dinner will take place at the Holborn Restaurant at 7 P.M. the same evening.

LUNATIC ASYLUMS, DORSET. — The recent increase in the number of cases requiring admission to asylums in Dorset has necessitated the enlargement of the existing system, and the County Council have agreed upon a scheme that has been laid before them, which will provide 200 additional beds and involve an outlay of from £60,000 to £70,000.

DONATION.—Mrs. Jane Burke has given £100 to Sir P. Dun's Hospital, Dublin.

DENTAL HOSPITAL OF LONDON. — Sir Edwin Saunders has accepted the treasurership of the Dental Hospital of London, in the place of the late R. C. L. Benan, Esq.

LADY DUFFERIN'S FUND.—Miss C. H. Graham, M.D., and Miss Anna Baumler, M.D., formerly students of the London School of Medicine for Women, have been appointed lady doctors under the Countess of Dufferin's Fund in India. The former will serve at Rangoon and the latter at Lahore.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The following is the list of office-bearers for the session 1890–91:—President: Mr. T. Gunton Alderton. Vice-presidents: Dr. Hart Vinen (honorary), Dr. Thudichum, Mr. F. Lawrance, Dr. Alderson, Mr. Keetley, Dr. Travers, Dr. Campbell Pope, Dr. Schacht, Mr. H. Percy Dunn, Dr. Clippingdale, and Dr. Abraham. Council: Mr. E. C. Barnes, Mr. R. F. Benham, Mr. W. P. Mallam, Dr. J. B. Ball, Dr. Blenkinsop, Dr. Crombie, Mr. Rickard Lloyd, Mr. F. Swinford Edwards, Dr. Clemow, Dr. R. Batten, Mr. T. Pickering Pick, and Mr. Menzies. Treasurer: Dr. C. Wells. Secretaries: Mr. Leonard Mark and Dr. Eccles. Librarian: Dr. Schacht.

PRESENTATIONS.—At the close of the examination of the nursing class of the St. John Ambulance Association, which took place at St. George's Schools, Everton, Liverpool, on the 16th inst., Dr. Buchanan, the class lecturer, was presented by R. D. Steel, Esq., on behalf of the ladies of the class, with a handsome carriage clock in morocco case.—On the 15th inst., at the Kensington Infirmary, Dr. Haward Van Buren, who is leaving, after five years' service, for Worthing, was presented by the officers and staff with a very handsome brass telescope reading lamp, and an illuminated address with the signatures of the donors, as a token of the esteem and regard with which he was held by the staff generally.—Mr. Robert Allman, L.K.Q.C.P.Irel., of Old Calabar, Africa, who has lately returned from the coast, has been presented by the agents and assistants of the European firms trading in Old Calabar River, and lately their medical officer, in token of their esteem, with an address, a handsome gold watch, a complete case of surgical instruments, and other gifts.—Mr. L. P. Gibson, L.R.C.P. Lond., M.R.C.S., on his resignation of the senior surgeonship at the Portsmouth Hospital, in consequence of having obtained a valuable appointment under the Khedive in the first hospital about to be established for natives in Upper Egypt, has been presented by the hospital nursing staff, as a testimony of their regard, with a handsome present.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.—The following office-bearers have been elected for the ensuing year:—President: John Magee Finny. Vice-President: G. F. Duffey. Censors: G. F. Duffey, W. Beatty, A. V. Macan, John Moloney. Additional Examiners to take the place of an absent Censor: G. P. L'Estrange Nugent, C. Joynt, Andrew J. Horne. Examiners for Licence in Midwifery: W. J. Smyly, A. J. Horne. Examiners for the Diploma in State Medicine: H. T. Bewley (Chemistry), J. W. Moore (Meteorology), F. B. Quinlan (Hygiene), Joseph F. Redmond (Medical Jurisprudence), G. P. Nugent (Vital Statistics). Examiners in Preliminary Education (Conjoint): J. Ashe (Science), H. T. Bewley (Languages). Examiners in addition to Censors under the Conjoint Scheme: Isaac Ashe and H. T. Bewley (Chemistry and Physics), E. Cosgrave and F. B. Quinlan (Materia Medica), J. Purser (Physiology), A. W. Foot and C. Nixon (Medicine), J. M. Redmond (Hygiene and Forensic Medicine). Examiners for the Conjoint Diploma in State Medicine: F. Quinlan, H. T. Bewley, T. W. Moore. Membership Examiners: G. F. Duffey, W. Beatty, A. W. Foot, E. Cosgrave, J. M. Purser, H. T. Bewley. College Representatives on Committee of Management under the Conjoint Scheme with the Royal College of Surgeons in Ireland: T. W. Grimshaw, Walter G. Smith, T. W. Moore. Representative on the General Medical Council: L. Atthill. Treasurer: L. Atthill. Registrar: J. W. Moore. Librarian: Samuel W. Wilson. The following were elected to the Fellowship: Edwin Lapper, Conolly Norman, and Francis J. O'Carroll.

THE editors of the *St. Petersburger Medicinische Wochenschrift*, Professor Dehio, of Dorpat, and Dr. Th. von Schröder, of St. Petersburg, thinking it advisable that a representative of the important town of Riga should be associated with them, have added to their number Dr. Johannes Krannhalss, prosector of the General Hospital, Riga.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at midnight on October 21st, 1890.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other diseases.	Total.	
Eastern Hospital	288	47	..	81	7	423	442
North-Western Hospital	333	35	..	30	1	401	443
Western ,,	185*	8	..	12	1	206	202
South-Western ,,	258*	..	..	..	..	258	340
South-Eastern ,,	259	19	1	42	1	322	462
Northern ,,	421	27	..	..	..	448	480
Gore Farm ,,	141	..	..	..	..	141	150
Totals	1885	136	1	165	10	2199	2579

* 1 infant and mother

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ANDERSON, W. H., M.B., C.M. Glasg., has been reappointed Medical Officer for the Hoxne Rural District.

ARMITAGE, EDWARD, L.R.C.P., L.R.C.S. Edin., L.F.P. & S. Glasg., has been appointed Medical Officer of Health to the Grimsby Union; also Public Vaccinator for the Waltham District of the Grimsby Union.

ASHWORTH, PERCY, F.R.C.S. Eng., M.D., B.S., B.Sc. Lond., has been appointed Assistant Surgeon to the Manchester Clinical Hospital for Women and Children.

BARON, H. N., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the No. 6 District of the Lutterworth Union.

BOND, F. F., M.D., M.B. Edin, has been reappointed Medical Officer of Health for Rastrick.

BRUCE, ALEX., M.D. Edin., has been appointed Assistant Physician to the Royal Infirmary, Edinburgh.

CALCOTT, GEO. W. B., M.R.C.S., has been appointed Medical Officer for the Barnwell District of the Oundle Union.

CHAMBERS, A. B., M.D.Irel., M.Ch., has been reappointed Medical Officer for the Stapleford District of the Shardlow Union.

DANIELL, G. H. S., M.B., B.C. Cantab., has been appointed Assistant House Surgeon to Guy's Hospital.

DAVIES, D. S., M.B. Lond., L.R.C.P., M.R.C.S., has been reappointed Medical Officer of Health for the Bristol Union District and Port.

DAY, E. J., M.R.C.S., has been reappointed Medical Officer for the Eastern Division of the Dorchester Rural District.

DOLAN, T. M., M.D. Durh., L.R.C.P., F.R.C.S. Edin., has been re-appointed Medical Officer for the Halifax Union Infirmary.

ELSOM, F. J., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer for the Cuckney District of the Worksop Union.

EMINSON, T. B. F., M.R.C.S., has been appointed Medical Officer for the Scotter District of the Gainsborough Union.

FULTON, THOMAS, M.D. Glas., L.R.C.S. Edin., has been appointed Resident Surgeon to the Belfast Union Hospital.

GALE, A. K., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Ecclesall Bierlow Union.

GIBSON, G. A., M.D. Edin., has been appointed Assistant Physician to the Royal Infirmary, Edinburgh.

GREEN, T. W., M.D. Glasg., M.R.C.S., has been reappointed Medical Officer for the Rawtenstall Union District.

GUTHRIE, LEONARD GEO., M.A., M.B. Oxon., M.R.C.P. Lond., has been appointed Assistant Physician to the North-West London Hospital, Kentish Town-road, vice W. G. Colman, M.B., M.R.C.P., resigned.

HEATHCOTE, B. A., M.B., C.M. Aberd., has been appointed Medical Officer for the Sandal Magna District of the Wakefield Union.

HEAVEN, J. C., L.R.C.P. Lond., M.R.C.S., has been reappointed Assistant Medical Officer of Health for the Bristol Port.

HILL, A. B., M.D. Giessen, L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer of Health for the Sutton-Coldfield Borough.

HILL, J. S., M.B., C.M. Edin., has been appointed Medical Officer for the Fifth Medical Relief District of the St. Saviour's Union, Borough.

HOOPER, ALFRED, M.R.C.S., has been reappointed Medical Officer for the Second District of the Burton-on-Trent Rural District.

HOYLE, JOHN, M.B., C.M. Edin., has been reappointed Medical Officer for the Soyland Urban District.

HUGHES, C., L.R.C.P., L.R.C.S. Irel., late Senior Resident Surgeon, Jervis-street Hospital, has been appointed Assistant Master to the National Lying-in Hospital, Dublin.

JONES, F. F., M.R.C.S., has been reappointed Medical Officer for the Llanfyllin Urban District.

KELLETT, R. G., L.K.Q.C.P., L.R.C.S. Irel., has been reappointed Medical Officer for Halstead.

KNAGGS, R. L., M.D. Camb., F.R.C.S., has been appointed Honorary Ophthalmic Surgeon to the Leeds Public Dispensary, vice Hartley, resigned.

LING, C. A. S., M.R.C.S., has been reappointed Medical Officer for the Colchester Port.

LUCAS, HERBERT, M.R.C.S., has been reappointed Medical Officer for the Godmanchester Urban District.

MACLENNAN, A. A., M.B., C.M. Aberd., has been appointed by the Zetland County Council District Parochial Medical Officer for Burra Tingwall, Whiteness, and Weisdale.

MANN, J. B., L.K.Q.C.P. Irel., M.R.C.S., has been appointed Medical Officer for the Central District of the Manchester Union, vice Blackmore, deceased.

MASSON, GEORGE B., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Fourth District of the Henstead Union.

MCCOULL, GEO. J., L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Medical Officer for the Seventh (West) District of the Hexham Union.

MCNEILL, ROGER, M.D., M.B. Edin., has been appointed Medical Officer of Health for the County of Argyll.

NEWBY, THOS., M.D. St. And., M.R.C.S., has been appointed Medical Officer for Cleethorpes.

O'KELLY, ROBERT, L.K.Q.C.P. Irel., L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Medical Officer for the Emo Dispensary, Mountmellick Union, vice Fisher.

OWEN, S. H., M.D. Irel., M.R.C.P. Lond., has been appointed Honorary Assistant Physician to the Manchester Clinical Hospital.

PHILIP, R. W., M.D. Edin., has been appointed Assistant to the Royal Infirmary, Edinburgh.

RAWSON, EDWIN, L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer for the Thornton Urban District.

RENDALL, WM., M.R.C.S., has been reappointed Medical Officer for the Western Division of the Dorchester Rural District

SCOTT, W. J., M.B., B.S. Durh., has been appointed Assistant House Physician to Guy's Hospital.

SKAE, F. D. A., M.D., L.R.C.S. Edin., has been appointed by the Zetland County Council District Medical Officer for Lerwick (Landward), Bressey, and Quarff, and County General Medical Officer.

SKIPWORTH, H., L.K.Q.C.P. Irel., M.R.C.S., has been reappointed Medical Officer for the Quarndon Urban District.

SNADDEN, JAMES, M.B., C.M. Edin., has been reappointed Medical Officer for the Fourth District of the Wortley Union.

STAMFORD, WILLIAM, L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer of Health for Tunbridge Wells.

STOKES, JOHN, M.B. Durh., M.R.C.S., has been appointed Medical Officer for the No. 1 District of Ecclesall-Bierlow Union.

STUART, R. W., L.R.C.P., L.R.C.S. Edin., has been appointed by the Zetland County Council District Medical Officer for Dunrossness, Sandwich and Cunningsburgh.

SWAYNE, F. G., M.B., B.C. Cantab., has been appointed Assistant House Surgeon to Guy's Hospital.

TAYLOR, HUGH, L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Rural Sanitary District of the Smallburgh Union.

TAYLOR, J. L., M.B., C.M. Aberd., has been appointed by the Zetland County Council District Medical Officer for Delting and North Mavine.

THOMPSON, E. J., M.R.C.S., has been reappointed Medical Officer for the Twycross District of the Market Bosworth Union.

WALKER, H. E., M.R.C.S., has been appointed District Medical Officer for the Corwen Union.

WARD, G. S., L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer for the Stevenage Urban District.

WILLIAMS, H. H., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Fourth District of the Chipping Sodbury Union.

WILSON, THOS., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health for Wallsend.

WRIGHT, HENRY, L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health for the Gainsborough Rural District of the Gainsborough Union.

WISKEN, HENRY, L.R.C.P. Edin., L.F.P.S. Glasg., has been re-appointed Medical Officer for Heywood Borough.

WYNNE, W. A. S., M.D. St. And., M.R.C.S., has been reappointed Medical Officer of Health for the Lowestoft Borough and Port.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

ANCOATS HOSPITAL, Manchester.—Honorary Physician, with charge of in- and out-patients.

BRADFORD INFIRMARY AND DISPENSARY.—House Physician. Salary £100 per annum, with board.

BRISTOL DISPENSARY.—Vacancies on the Medical Staff. (Apply to the Secretary, Castle-green, Bristol.)

CAPE OF GOOD HOPE GOVERNMENT AGENCY, 112, Victoria-street, London, S.W.—Bacteriologist and Toxicologist for the Cape of Good Hope. Salary of Bacteriologist £500 a year. A free first-class passage by steamer (including railway fare to port of embarkation) will be provided. Salary of Toxicologist £400 a year. A free first-class passage by steamer (including railway fare to port of embarkation) will be provided. (Apply to Mr. C. Mills, Agent-General for the Cape of Good Hope, at the above offices.)

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Pathologist. Salary 100 guineas per annum.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. No salary, but board, residence, and allowance for washing provided. (Apply to the Secretary, 24, Finsbury-circus, E.C.)

CLINICAL HOSPITAL FOR WOMEN AND CHILDREN, Park-place, Manchester.—House Surgeon. Salary £80 per annum, with apartments and board.

COUNTY BOROUGH OF SOUTH SHIELDS.—Medical Officer of Health for the Borough. Salary £280 as Medical Officer, and 200 per annum for attending patients at the Infectious Hospital. (Apply to Mr. Joseph M. Moore, 35, Market-place, South Shields.)

COUNTY LUNATIC ASYLUM, Burntwood.—Junior Assistant Medical Officer. Salary £100 per annum, with board, lodging, washing, and attendance.

HOSPITAL, King's Lynn.—House Surgeon and Secretary. Salary £80, rising by annual increments of £10 to £100 per annum, with residence, board, washing, and attendance.

KING'S COLLEGE HOSPITAL, London.—Assistant Physician.

LIVERPOOL DISPENSARIES.—Head Surgeon. Salary £200 per annum, with apartments, board, and attendance. (Apply to Mr. Greene, Secretary, Leith Offices, 34, Moorfields, Liverpool)

NORTH-WEST LONDON HOSPITAL, Kentish-town-road.—Assistant Surgeon.

POOLE FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Junior Medical Officer. Salary £120 per annum (out-door), together with 10s. for each case of Midwifery attended by him. (Apply to Mr. Pearce, Secretary).

RADCLIFFE INFIRMARY, Oxford.—House Surgeon. Salary £80, with board, lodging, and washing. Tenable for two years.

SCARBOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Assistant Medical Officer (out-door). Salary £140 for the first year, and £150 for the second year, if satisfactory, with an allowance for Midwifery cases. (Apply to the Secretary, St. Mary's Walk, Scarborough.)

SICK CHILDREN'S HOSPITAL, Newcastle-on-Tyne.—Resident Medical Officer. Salary £60, with board, lodging, and laundry.

UNIVERSITY COLLEGE, London.—The Joddrell Professorship of Comparative Anatomy and Zoology.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's-road, Chelsea, S.W.—Assistant Physician in charge of Out-patients; appointment for five years.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's-road, Chelsea, S.W.—Assistant Surgeon in charge of Out-patients.

Births, Marriages, and Deaths.

BIRTHS.

ALEXANDER.—On Oct. 16th, at Tecumseh House, Kent-road, Southsea, the wife of S. P. Alexander, M.D., M.R.C.S., of a daughter.

ARNOTT.—On Oct. 19th, at Fairmount, Moffat, Dumfriesshire, the wife of Surgeon-Major James Arnott, M.D., Grant Medical College, Bombay, of a daughter.

BURROWS.—On Oct. 18th, at Penrhyn Lodge, Regent's park, the wife of W. S. Burrows, L.D.S. Eng., of a daughter.

COXWELL.—On Oct. 14th, at Fopstone-road, Earl's-court, S.W., the wife of C. Fillingham Coxwell, M.D., M.R.C.P., of a daughter.

DALY.—On Oct. 16th, at Hull, the wife of Edward O. Daly, M.A., M.D. Oxon., of a daughter.

LESLIE.—On Sept. 17th, at Rangoon, the wife of J. T. W. Leslie, M.B., Indian Medical Service, of a daughter.

MARSH.—On Oct. 21st, at Grasmere, Rotton-park-road, Edgbaston, the wife of Frank Marsh, F.R.C.S., of a daughter.

TURLE.—On Oct. 20th, at Cliffe House, Enderby, the wife of Arthur Turle, M.R.C.S., of a daughter, stillborn.

WETHERED.—On Oct. 18th, at 34, Queen Anne-street, Cavendish-square, W., the wife of Frank J. Wethered, M.D., M.R.C.P., of a daughter.

MARRIAGES.

AWDRY—KING.—On Oct. 15th, at Pedmore, Worcestershire, Walter R. Awdry, M.B., of Berkeley, Gloucestershire, youngest son of the late Rev. C. R. E. Awdry, Vicar of Draycott, Wilts, to S. Margaret Catherine, third daughter of W. H. King, of Pedmore House.

EMERSON—PROVIS.—On Oct. 18th, at St. John's Church, Kingstone Lisle, Berks, Thomas G. Emerson, M.D., of Wantage, to Mary Evelyn, younger daughter of the late Alfred Provis, Esq., of Kingstone Lisle.

MARTEN—MONTMITH.—On Sept. 1st, at Christ Church, North Adelaide, S.A., by the Very Rev. the Dean of Adelaide, Robert Humphrey Marten, M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., to Annie Fresbairn, daughter of the late T. F. Monteith, Esq., of North Adelaide.

SHEWAN—CORSE-SCOTT.—On Oct. 15th, at St. George's, Hanover-square, George Shewan, Bengal Medical Service, to Una Corse-Scott.

DEATHS.

LANGSTON.—On Oct. 16th, 1890, at 95, Linden-gardens, Hyde-park, suddenly, John Langston, Esq., F.R.C.S., and Justice of the Peace for the County of Kent; late of Strood, Kent. *Requiescat in pace.*

MACKINTOSH.—On Sept. 5th, at Belvedere House, Sliema, Malta, Dr. W. H. Mackintosh, aged 72.

SPENCER.—On Oct. 19th, at Althorp House, Castelnau, Barnes, S.W., after a long illness, George Spencer, L.R.C.P., M.R.C.S., L.S.A., formerly of No. 8, Kensington-park-road, Bayswater, aged 73.

WOLSTENHOLME.—On Oct. 18th, at Tottenham High Cross, Henry John Wolstenholme, Surgeon, formerly of Holywell, Flintshire, aged 76.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, October 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
HOSPITAL FOR DISEASES OF THE THROAT (Golden-square, W.).—Dr. Greville MacDonald: Rhinitis. (Post-Graduate Lecture.)
LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital, Moorfields: 1 P.M., Mr. Marcus Gunn: External Diseases of the Eye. New Infirmary, Paddington: 4 P.M., Mr. Reginald Harrison: Clinical Lecture on Diseases of the Bladder. 5 P.M., Dr. Savill: Pathological Demonstration.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. William Rose: A case in which the Gasserian Ganglion was Removed. (The patient will be shown, and the paper will be illustrated by diagrams.)—Mr. C. B. Lockwood: On the Abuse of Drainage.

Tuesday, October 28.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.
LONDON POST-GRADUATE COURSE.—Hospital for Diseases of the Skin, Blackfriars: 4.30 P.M., Dr. Payne: Eczema, its Treatment.
THE SANITARY INSTITUTE (Parkes Museum, Margaret-st., W.).—8 P.M. Mr. Charles Jones: Scavenging, Disposal of Refuse and Sewage.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Arthur E. Barker: Seven cases of Excision of the Hip combined with the Hot-water Flushing Method; Primary Union in Six.—Mr. W. G. Spencer: Soot in Cells of Chimney-sweep's Cancer.

Wednesday, October 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
HOSPITAL FOR DISEASES OF THE THROAT (Golden-square, W.).—Mr. Mark Hovell: Some Affections of the Middle Ear. (Post-Graduate Lecture.)
LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Hector Mackenzie: Clinical Demonstration on Cases of Mitral Stenosis. Royal London Ophthalmic Hospital: 8 P.M., Mr. A. Quarry Silcock: Ophthalmoscopic Cases.

Thursday, October 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
LONDON POST-GRADUATE COURSE.—National Hospital for the Paralysed and Epileptic: 2 P.M., Mr. R. Brudenell Carter: Ocular Symptoms in Diseases of the Nervous System. Hospital for Sick Children, Gt. Ormond-st.: 4 P.M., Dr. Angel Money: Demonstration of Medical Cases.
CHARING-CROSS HOSPITAL.—4 P.M. Dr. Murray: Practical Applications of Electricity. (Post-Graduate Course.)

Friday, October 31.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Hector Mackenzie: Clinical Demonstration on Cases of Mitral Incompetence.
THE SANITARY INSTITUTE (Parkes Museum, Margaret-st., W.).—8 P.M. Mr. Shirley F. Murphy: Infectious Diseases and Methods of Disinfection.

Saturday, November 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 23rd, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Oct. 17	29·87	N.W.	49	45	67	58	45	·02	Overcast
,, 18	29·97	N.W.	52	47	82	56	47	,,	Cloudy
,, 19	30·19	N.	49	47	63	53	44	,,	Overcast
,, 20	30·27	N.W.	49	47	65	57	45	,,	Overcast
,, 21	30·27	S.E.	47	46	60	52	45	·07	Raining
,, 22	30·52	N.E.	45	42	78	54	42	,,	Hazy
,, 23	30·50	N.W.	49	48	61	55	44	,,	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET to be addressed "To the Publisher."

We cannot undertake to return MSS. not used.

ANTIQUARIAN DISCOVERY IN CO. CORK.

AT a place called Ballynock some stones bearing Ogham inscriptions have recently been discovered. The chamber in which the stones were found was 3ft. 9in. high by 3ft. 6in. wide, and was about ninety feet in length. Eight stones so far have been found, and it is expected that others may come to light. It may be mentioned that "Ogham" (pronounced *Ovam*) is a term used for a kind of writing employed in the Pagan period of Irish history. It consists of straight lines placed at various angles, and arranged in rows on different sides of a stem line. The inscriptions, which were usually placed on the tombs of kings, are read from below upwards.

Dr. D. J. Allen.—We have ourselves had occasion to examine several teas which are styled "digestive," "dietetic," &c. (*vide* Analytical Records, THE LANCET, vol. i. 1890, p. 1023; vol. i. 1889, p. 894; vol. ii. 1888, pp. 377 and 824). We do not know of a preparation of the whole leaf that has been deprived of tannin. Fluid extracts of tea are in the market, we believe, which are said to be free from it.

Mr. G. R. Penrose.—The rule varies in different places. Our correspondent should find out the rule of his village. He cannot be wrong, however, in calling on the practitioners of the place. We cannot see that the clergyman is to be exempted from charge on the ground mentioned.

Mr. McMunn (Crouch-end).—The paper is marked for insertion.

VACCINATION.

To the Editors of THE LANCET.

SIRS,—I see frequent references in your journal to "insusceptible" cases, and am anxious to see one. I have before me a record of over 6000 vaccinations performed in my present district, and have held two other districts previously, and yet I have never seen an insusceptible child. Has any public vaccinator seen one? There are medical men who charge 1*s.* to vaccinate a child in four places, 1*s.* 6*d.* in three places, 2*s.* in two places and so on. Are these the men who give the insusceptible certificates?

I am, Sirs, yours truly,

October, 1890. PUBLIC VACCINATOR.

Nemo.—1. The matter is one entirely for arrangement between principal and assistant.—2. The title is generally conceded to the holder of such a qualification, but he is not in strictness entitled to use it.

REFINEMENT IN OPERATIVE SURGERY.

To the Editors of THE LANCET.

SIRS,—I write in the true interest of the profession, and invoke your powerful coöperation. I want to protest against the indifference to those impulses and feelings of delicacy which should always pervade our noble profession shown by a very small minority of surgeons when operating upon females. I do not here allude to obstetrical operations, which are *sui generis*, and stand altogether in a different category, nor to grave operations, such as ovariotomy, herniotomy, &c., which from their very nature render exposure more or less a practical necessity; but I refer to such a barbarism as to place any woman, and still more a sensitive lady of refined instincts, in the lithotomy position when about to perform some comparatively trivial operation upon the rectum or anus, although the right or left lateral decubitus would be quite sufficient for any competent operator. I feel confident that no right-minded person will hesitate to pronounce such procedure as a breach of common decency, as well as an abuse (I cannot help adding cowardly, because under cover of an anæsthetic which gags remonstrance) of privilege and opportunity, besides presenting a revolting spectacle for any female attendants present (as they have themselves confided to patients). In such matters whatever is unnecessary is unjustifiable, and either proclaims incompetency or utter disregard to common decency and to the feelings of patients; and I would warn all such offenders that by so doing they are not only playing into the hands of "female practitioners," but (as they richly deserve) alienating themselves from the recommendation of their patients, which is no mean factor in a successful practice.

I am, Sirs, yours obediently,

Oct. 20th, 1890. GYNÆCOLOGIST.

C. B. A.—Intense heat, as used in establishments for disinfection, is supposed to be sufficient to destroy the germs of all disease. We would recommend our correspondent to be very careful in regard to the hands, especially cleaning below the nails with the brush and a solution of soda, and employing an antiseptic ointment for digital examination. If our correspondent has used all possible precautions to maintain asepsis, we recommend him to consult, and talk over thoroughly all the possible sources of infection, with a reliable professional brother, who may detect some fault in his precautionary scheme.

Dr. Hugh Wood.—Our correspondent's letter is too long for our space, especially as similar views have been fully ventilated in our columns by Dr. Rentoul.

L.R.C.P. (Charnwood).—Medical Institute, Edmund-st., Birmingham.

EXTENSIVE ECZEMA.

To the Editors of THE LANCET.

SIRS,—I have at present a case of chronic eczema in an old man extending over the entire surface, the irritation from which is intolerable. The ordinary remedies have been tried, arsenic amongst them. An antibilious dose given occasionally to regulate the bowels has some little effect in lessening the irritation. Tanner, in his work, writes of a case in which (all other remedies failing) he tried tar capsules successfully. I am treating my patient with these, but with what result I cannot yet say. Meantime suggestions by any of your numerous readers will oblige,

Yours obediently,

Oct. 9th, 1890. M.D.

Mr. Alfred R. Iles (Taunton).—In an annotation which appeared in THE LANCET of Sept. 20th last the cause of the irritation is said to reside in the leaves, on which Dr. Wilson of St. Andrews found glandular hairs resembling those of the stinging nettle. The immediate cause of the trouble has yet to be proved.

A. B.—Full particulars of the course will be found in our Students' Number, published on Sept. 6th last.

Mr. J. C Wilson.—So far as we know, no evidence exists to warrant such a conclusion.

SEWER GRATINGS.

To the Editors of THE LANCET.

SIRS,—May not the street-level ventilators into the main sewers be a factor in the spread of diphtheria &c.? Under certain meteorological and other conditions these ventilators are most objectionable, and children are often to be seen playing over them.

I am, Sirs, yours faithfully,

Oct. 11th, 1890. M.D., F.R.Met.Soc.

TREATMENT OF HYSTERO-EPILEPSY.

To the Editors of THE LANCET.

SIRS,—Can any of your readers refer me to records of cases of hystero-epilepsy which have been successfully treated either by oöphorectomy or any other means? There does not appear to be any mention of the subject in my edition of Neale's Digest.

I remain, Sirs, yours faithfully,

Oct. 12th, 1890. B. C. D.

A PORTABLE ICE-MAKING MACHINE.

WE have had a recent opportunity of examining the "Champion" hand ice-making machine. This is a device that can render efficient service where ice cannot be procured in the ordinary manner. For instance, in hospitals situated in country districts, especially small cottage isolation hospitals for fever cases; or on board ships and yachts that cannot carry a supply of ice. In the colonies and up-country stations also the apparatus may render very great service. It is simply an air-pump, to which any jar, bottle, or ice-cream freezing mould can be applied. By working an ordinary pump handle the air is rapidly drawn out of the bottle and passed over the surface of sulphuric acid, which is placed in a drum for this purpose. Thus the humidity being absorbed by the acid and a vacuum produced, the water in the bottle rapidly freezes. All that is necessary, having procured the machine, is to purchase some of the ordinary sulphuric acid of commerce (specific gravity 1845). This acid must from time to time be renewed as it becomes weaker by absorbing the water from the air. But a shilling's worth of acid will suffice to freeze seventy or eighty bottles; thus the principal expense is the cost of the machine itself. The smallest sized machine weighs a hundred-weight. It can be packed in a little box, and can therefore be carried about with but little difficulty. Nor does the working of the pump handle require any muscular force beyond that which a young child could supply. Ice is produced after about five minutes' easy pumping, and the invention is therefore calculated to prove very useful where the ordinary block ice cannot be purchased.

Mr. Wardleworth.—The proceedings mentioned by our correspondent were quite correct. The justices have power to call in any surgeon they think proper; and in this case it was the duty of the surgeon of the workhouse to write the certificate.

Carbo-Rivulus.—We know of no way of rapidly getting rid of the smell of iodoform. In this connexion we may refer to a paragraph headed "Aristol" in THE LANCET of the 11th inst., p. 783.

Dr. Thresh's communication arrived too late for consideration this week.

SULPHONAL.

To the Editors of THE LANCET.

SIRS,—In reference to your report from Vienna, in THE LANCET of Oct. 11th, stating that some deaths had occurred from the use of sulphonal, I feel myself bound to state my experience with this drug, and, as a warning against using it too freely, to draw attention to the serious effects produced by it.

Three cases of sulphonalism came under my observation and treatment during the past season. All three were middle-aged ladies of good social standing, who had been advised by their medical attendant to take about two grammes of sulphonal whenever they could not sleep. This had been going on for from three to five months, and the use of the drug had become a perfect mania—so much so that the absence of it caused symptoms similar to those experienced when overcoming the morphia habit. A feeling of intense dizziness, weakness of thought and memory, tottering gait as under the influence of alcohol, inability of writing straight (unsteady characters and in an ascending line), loss of appetite, and general weakness caused the patients to seek medical aid. The complexion of these formerly healthy women had become somewhat sallow-looking, and the eyes rather dim and expressionless. After several weeks' treatment sulphonal could be dispensed with, and subsequently the patients were restored to their former good health.

I am, Sirs, your obedient servant,

Baden-Baden, Oct. 11th, 1890. WILLIAM HENRY GILBERT.

X. Y. Z.—We consider the questions quite distinct. If our correspondent likes to raise the other question separately in a short letter, we shall try to find room for it.

Mr. R. Jenkinson.—The matter is purely one of contract. Our correspondent should take the opinion of his solicitor.

SALINE APERIENTS IN DYSENTERY.

To the Editors of THE LANCET.

SIRS,—Mr. Leahy, in your issue of Oct. 4th, p. 711, has brought before the notice of the profession in a practical manner the treatment so strongly recommended by Dr. Heberden, and so frequently carried out with advantage by several observers since. Dr. Ayres in 1847, and Mr. Ford in 1857, wrote in praise of the treatment of dysentery by sulphate of magnesia; and several other papers upon the subject may be consulted by reference to the Medical Digest, Section 904.

I am, Sirs, yours obediently,

Boundary-road, N.W., Oct. 18th, 1890. R. NEALE, M.D.Lond.

F.R.C.S. (Southsea).—National Hospital for Epileptics, Queen-square; or the Hospital in Portland-place.

Dr. W. A. Hatton.—The composition of the ointment is given in Murrell's book on Poisoning.

M.E.—Our correspondent should consult his medical attendant

COMMUNICATIONS not noticed in our present number will receive attention in our next.

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NEWSPAPERS.—*Scottish Leader, Glasgow Evening News, Sussex Daily News, Scotsman, Evening Express (Liverpool), St. Marylebone Mercury, Staffordshire Chronicle, Birmingham Post, East End News, Cambridge Express, Western Morning News, Hertfordshire Mercury, Birmingham Daily Gazette, Windsor and Eton Express, Local Government Chronicle, Man of the World, Lincolnshire Chronicle, Brisbane Telegraph, Manchester Guardian, Bradford Chronicle, Yorkshire Post, Sheffield Independent, Manchester Examiner, Northern Echo, Dundee Advertiser, Belfast News Letter, Evening Times (Glasgow), Weekly Free Press and Aberdeen Herald, Mexborough and Swinton Times, Kilkenny Journal, Sunday Times, Builder, Sheffield Daily Telegraph, Spectator, Chemist and Druggist, West Middlesex Standard, Broad Arrow, Metropolitan, Pharmaceutical Journal, Evening Mail (Portsmouth), Guy's Hospital Gazette, City Press, Mining Journal, Surrey Advertiser, Magazine and Book Review, Leeds Mercury, National Reformer, Windsor and Eton Gazette, Law Journal, West Middlesex Advertiser, Saturday Review, Bristol Mercury, Freeman's Journal, Rugby Advertiser, Era, Shrewsbury Chronicle, Transvaal Mining Argus, Liverpool Daily Post, Ilkley Free Press and Addingham Courier, Lancaster Guardian, Courier de Londres, Devon Express, South Wales Daily News, Admiralty Gazette, Toronto Globe, Oracle, Warwick Advertiser, Aberdeen Journal, Essex Weekly News, Worcestershire Advertiser, Halifax Courier, Wrexham Advertiser, Evening Dispatch (Edinburgh), Rothesay Express, Architect, The Student*, &c., have been received.

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